

UPDATE ON PROPOSED MISSOURI LEARNING STANDARDS

STATUTORY AUTHORITY:

Sections 160.514 and 161.092, RSMo

Consent
Item

Action
Item

Report
Item

DEPARTMENT GOAL NO. 1:

All Missouri students will graduate college and career ready.

SUMMARY:

Section 160.514.1, RSMo addresses academic performance standards for Missouri’s students and outlines a process which must be followed whenever the State Board of Education develops, evaluates, modifies, or revises academic performance standards or learning standards.

The law also states that the State Board of Education shall solicit comments and feedback on the academic performance standards or learning standards from academic researchers and the Joint Committee on Education. This presentation will review all feedback on the proposed standards and will introduce the final recommendations to be presented to the State Board for approval in March.

PRESENTER:

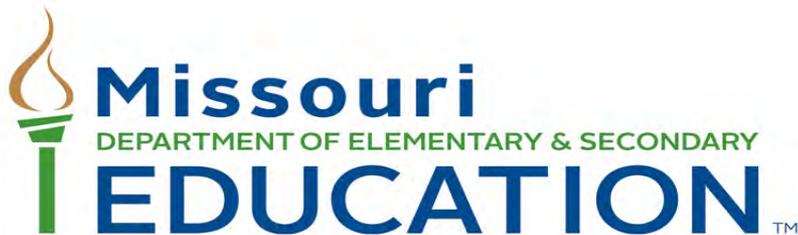
Blaine Henningsen, Assistant Commissioner, Office of College and Career Readiness, will assist with the presentation and discussion of this agenda item.

Missouri Learning Standards

Update

Presentation for
State Board of Education

February 16, 2016





Show-Me Standards

Knowledge

A foundation in reading, writing, mathematics, world and American history, forms of government, geography, science, health/physical education and the fine arts – should also be incorporated into courses in career and technical education and practical arts.

Performance

The ability of students to apply their knowledge and skills to the kinds of problems and decisions they will likely encounter after they graduate.

Missouri Learning Standards

Grade- and Course-Level Expectations in:

- Agriculture and natural resources
- Business and information technology
- **English language arts**
- Fine arts
- Health/physical education
- Health services
- Human services
- Industrial and engineering technology
- **Mathematics**
- **Science**
- **Social studies**

Moving Forward

- Reviewed the proposals submitted by the workgroups
- Reviewed suggestions/issues that were identified through the commenting process

Missouri Revised Statutes 160.526

In establishing, evaluating, modifying and revising the academic performance standards and learning standards and the statewide assessment system...the state board of education shall consider the work that has been done by:

- other states
- recognized regional and national experts
- professional education discipline-based associations
- other professional education associations
- the Department of Higher Education's curriculum alignment initiative
- any work in the public domain

Latest Work

- **Consistency**
- **Organization**
- **Alignment**
- **Content/Rigor**

English Language Arts

- **Aligned Grade Level Expectations and Course Level Expectations (GLEs/CLEs) to be parallel across internal strands**
e.g., in kindergarten *phonics* students are asked to identify **all** sounds in letters, but in kindergarten *reading* students were not asked to identify **all** letters
- **Removed redundant GLEs and CLEs**
e.g., “write first and last name” appears in kindergarten and first grade
- **Added language to align mismatched K-12 GLEs and CLEs**
e.g., added “spelling and punctuation” to the workgroup submitted 6-12 writing expectations to create parallel expectations K-12
- **Used parallel structure in wording**
e.g., consistently starting with action verb
- **Assured rigor by changing verb**
e.g., from “identify parts of speech” to “use parts of speech”

Math

- **Used parallel structure in wording**
e.g., consistently starting with action verb
- **Removed redundancies in GLEs and CLEs and language**
e.g., removed Algebra I CLE “Graphically show that the solution of the equation...” that is a repeat of an earlier GLE/CLE
- **Provided clarity**
e.g., Grade 4 math “Apply the area...in real world and mathematical problems” became “Apply the area...to solve problems”
- **Separated GLEs/CLEs which had multiple “expectations” into two separate GLEs/CLEs**
e.g., Grade 5 math “b. the two numerical patterns into two sets of ordered pairs then graph the two sets of ordered pairs on the same coordinate plane” became “b. Translate two numeric patterns into two sets of ordered pairs. c. Graph numeric patterns on the coordinate plane.”

Science

- **Incorporated concepts from GLEs/CLEs across the grade-levels**
e.g., mass is introduced in kindergarten, but then not covered again until 5th grade. Included comparing and contrasting mass/weight in 1st Grade.
- **Provided foundation for concepts explored at later grade-levels**
e.g., middle school Life Science lacked a foundation of photosynthesis which becomes major building block of understanding the cycling of matter and energy and flow of energy.
- **Included Engineering, Technology and Application of Science concepts**
The inclusion of Engineering, Technology and Application was included to support STEM schools and transitions to high school course selections that support the STEM pathways.
- **Included a scope and sequence of concepts K -12 to provide a scaffold for districts/schools in their development and alignment of curriculum.**

Social Studies

- **Added discipline name for focus in the skills and research GLEs/CLEs**
e.g., “From an American history perspective, describe how people’s perspectives affected the artifacts they created.” (HS American history)
- **Enhanced Geography CLEs in other social studies courses.**
e.g., “Locate key world nations. ” (MS world history)
- **Aligned research skills GLEs/CLEs by grade level and course to support the K-5 workgroup recommendations.**
e.g., “With assistance, develop a research plan....in American history.” (MS American history)
- **Expanded time periods and world regions in GLEs/CLEs to aid in K-12 alignment.**
e.g., “Describe the character traits and civic attitudes of historically significant individuals from ~~1800-1940~~ 1800-2000.” (5th grade social studies)

Next Step Documents

- **Teacher-friendly crosswalks aligning the current Missouri Learning Standards to State Board adopted GLEs/CLEs**
- **Supplementary instructional and assessment materials will be provided**
- **Glossaries (as appropriate)**
- **Document aligning the GLEs/CLEs to the Show-Me Standards**

Next Steps

- **March 15 Board Meeting – Recommendations presented to the board**

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K-5 English Language Arts Grade-Level Expectations

*Missouri Department of Elementary and Secondary Education
Spring 2016*

Reading

1 Develop and apply skills to the reading process.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	With assistance, develop and demonstrate reading skills in response to read alouds by:	With assistance, develop and demonstrate reading skills in response to reading text and read alouds by:	Develop and demonstrate reading skills in response to text by:	Develop and demonstrate reading skills in response to text by:	Develop and demonstrate reading skills in response to text.	Develop and demonstrate reading skills in response to text.
	<p>a. predicting what might happen next in a text based on the cover, title, and illustrations</p> <p>b. asking and responding to questions about texts read aloud</p> <p>c. retelling main ideas or important facts from a read aloud or familiar story</p> <p>d. connecting the information and events of a text to experiences</p> <p>e. recognizing beginning, middle, and end</p>	<p>a. predicting what will happen next using prior knowledge, confirm by “reading the part that tells”</p> <p>b. asking and responding to relevant questions</p> <p>c. seeking clarification and locating facts and details about stories and other texts</p> <p>d. retelling main ideas in sequence including key details</p> <p>e. establishing purpose for reading selected texts (with support)</p> <p>f. recognizing beginning, middle, and end</p>	<p>a. using text features to make and confirm predictions, or explain why not confirmed</p> <p>b. asking and responding to relevant questions</p> <p>c. seeking clarification, and using information/ facts and details about stories and other texts and supporting answers with evidence from text</p> <p>d. retelling a story’s beginning, middle, and end including fables and folktales determining their central message, lesson or moral</p>	<p>a. explain how specific aspects of a text’s illustrations contribute to what is conveyed by the words in a story</p> <p>b. asking and responding to relevant questions</p> <p>c. seeking clarification, and locating facts and details about stories and other texts and supporting answers with evidence from text</p> <p>d. retelling a story’s beginning, middle, and end including fables and folktales determining their central message, lesson or moral</p> <p>e. establishing a purpose for reading selected texts</p>	Continue to address earlier standards as needed and as applies to more difficult texts.	
Comprehension						
6-12 Correlation Reading Literary 1A, Reading Informational 1A						

Reading

1	Develop and apply skills to the reading process.					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A (cont'd)		g. monitoring comprehension and making corrections and adjustments when that understanding breaks down	e. establishing purpose for reading selected texts f. monitoring comprehension and making corrections and adjustments when understanding breaks down	f. monitoring comprehension and making corrections and adjustments when understanding breaks down		
Comprehension 6-12 Correlation Reading Literary 1A, Reading Informational 1A						

Reading

1 Develop and apply skills to the reading process.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B	With assistance, develop an understanding of vocabulary by:	With assistance, develop an understanding of vocabulary by:	Develop an understanding of vocabulary by:	Develop an understanding of vocabulary by:	Develop an understanding of vocabulary by:	Develop an understanding of vocabulary by:
Vocabulary 6-12 Correlation Reading Literary 1B, Reading Informational 1B	<ul style="list-style-type: none"> a. identifying and sorting pictures of objects into conceptual categories b. demonstrating understanding of opposites (antonyms) c. distinguishing meaning between verbs describing the same action d. using a picture dictionary to find words e. using words and phrases acquired through conversations, reading and being read to and responding to texts 	<ul style="list-style-type: none"> a. using common affixes to figure out the meaning of a word b. identifying common root words and their inflectional endings c. identifying words that name actions and words that name persons, places, or things d. recognizing that compound words are made up of shorter words e. identifying sensory words and phrases in stories and poems f. determining what words mean from how they are used in context of a sentence either heard or read g. identifying and sorting words into conceptual categories 	<ul style="list-style-type: none"> a. using prefixes, root words, and suffixes to determine the meaning of words b. using knowledge of the meaning of individual words to determine the meaning of compound words c. using context to determine the meaning of a new word or multiple-meaning word in text d. identifying and using words that are antonyms and synonyms e. locating words in a dictionary or glossary to determine or clarify the meaning of words or phrases 	<ul style="list-style-type: none"> a. decoding and identifying the meaning of common prefixes and suffixes and knowing how they change the meaning of root words b. using sentence level context to determine the relevant meaning of unfamiliar words or distinguish among multiple meaning words and homographs c. identifying and using antonyms, synonyms, homographs, and homophones d. distinguishing the literal and non-literal meanings of words and phrases in context 	<ul style="list-style-type: none"> a. determining the meaning of academic English words derived from Latin, Greek, or other linguistic root words and their prefixes and suffixes b. using the context of the sentence to determine the meaning of unfamiliar words or multiple-meaning words c. determining a word's part of speech from its suffix d. completing analogies using knowledge of antonyms and synonyms 	<ul style="list-style-type: none"> a. determining the meaning of academic English words derived from Latin, Greek, or other linguistic root words and their prefixes and suffixes through context b. using context to determine or clarify the meaning of unfamiliar or multiple-meaning words c. constructing analogies with known antonyms and synonyms d. identifying and explaining the meaning of common idioms, adages, similes, metaphors, hyperboles and other sayings

Reading

1 Develop and apply skills to the reading process.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B (cont'd)		<ul style="list-style-type: none"> h. distinguishing shades of meaning among verbs and adjectives i. locating words in a dictionary j. using words and phrases acquired through conversations, reading and being read to and responding to texts 	<ul style="list-style-type: none"> f. distinguishing meaning among closely related verbs and adjectives g. recognizing that some words have literal and non-literal meanings 	<ul style="list-style-type: none"> e. determining the meaning of the new word formed when a known affix is added to a known base word f. using a dictionary or a glossary to determine the meanings, syllabifications, and pronunciation of unknown words g. identifying and discussing analogies h. determining the meaning of the author's use of similes and metaphors to produce imagery i. distinguishing among related words that describe degrees of certainty j. acquiring and using conversational, general academic, and domain-specific words and phrases 	<ul style="list-style-type: none"> e. identifying the meaning of common idioms and figurative language f. using a dictionary or glossary to determine the meanings, syllabication, and pronunciation of unknown words g. acquiring and using conversational, general academic, and domain-specific words and phrases 	<ul style="list-style-type: none"> e. identifying and using words and phrases that signal contrast, addition, and other logical relationships f. using a dictionary, a glossary, or a thesaurus (printed or electronic) to determine pronunciations, parts of speech, meanings, and alternate word choices g. acquiring and using conversational, general academic, and domain-specific words and phrases
Vocabulary						
6-12 Correlation Reading Literary 1B, Reading Informational 1B						

Reading

1 Develop and apply skills to the reading process.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C	With assistance, determine the connection between:	Determine the connection between:	Determine the relevant connections between:	Explain relevant connections between:	Explain relevant connections between:	Compare, contrast, and analyze relevant connections between:
	a. text to self (text ideas and own experiences) b. text to text (text ideas including similarities and differences in fiction and nonfiction)	a. text to text (text ideas including similarities and differences in fiction and nonfiction)	a. text to text (text ideas, including similarities and differences regarding information and relationships in fiction and nonfiction) b. text to world (text ideas regarding experiences in the world)	a. text to text (ideas and information in various fiction and nonfiction works, using compare and contrast) b. text to world (text ideas regarding experiences in the world)	a. text to text (ideas and information in various fiction and nonfiction works, using compare and contrast) b. text to world (text ideas regarding experiences in the world by demonstrating an awareness that literature reflects a cultural and historical time frame)	a. text to text (ideas and information in various fiction and nonfiction works, using compare and contrast) b. text to world (text ideas regarding experiences in the world by demonstrating an awareness that literature reflects a cultural and historical time frame)
As students mature and grow as readers, the text level and connections should become more complex.						

Making Connections
6-12 Correlation Reading Literary 3B

Reading

1	Develop and apply skills to the reading process.					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
D	Read independently for sustained periods of time by:	Read independently for sustained periods of time by:	Read independently for sustained periods of time by:	Read independently for sustained periods of time by:	Read independently for sustained periods of time by:	Read independently for sustained periods of time by:
Independent Text No 6- 12 Correlation	a. engaging with text as developmentally appropriate	a. engaging with and reading text that is developmentally appropriate b. producing evidence of reading	a. reading text that is developmentally appropriate b. producing evidence of reading	a. reading text that is developmentally appropriate b. producing evidence of reading	a. reading text that is developmentally appropriate b. producing evidence of reading	a. reading text that is developmentally appropriate b. producing evidence of reading

DRAFT

Reading

2		Develop and apply skills and strategies to comprehend, analyze and evaluate fiction, poetry and drama from a variety of cultures and times.					
		Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	With assistance, read, infer and draw conclusions to:	With assistance, read, infer, analyze, and draw conclusions to:	Read, infer, analyze, and draw conclusions to:	Read, infer, analyze, and draw conclusions to:	Read, infer, analyze, and draw conclusions to:	Read, infer, analyze, and draw conclusions to:	
	<p>a. identify elements of a story, including setting, character, and key events</p> <p>b. retell a main event from a story read aloud and familiar stories</p> <p>c. recognize sensory details</p> <p>d. recognize different types of texts</p> <p>e. name author and illustrator of a story and describe how each is telling the story</p> <p>f. compare and contrast adventures of characters in familiar stories</p> <p>g. ask and answer questions about unknown words in text</p> <p>h. recognize recurring phrases and characters in traditional fairytales, and folktales from various cultures</p>	<p>a. identify and describe characters, setting, problem, solution, and events in logical sequences</p> <p>b. discuss the main idea of a story</p> <p>c. describe sensory details</p> <p>d. explain the function of recurring phrases</p> <p>e. explain the actions of the main character</p> <p>f. identify who is telling the story</p> <p>g. compare and contrast adventures and experiences of characters stories</p>	<p>a. identify and describe the setting, problems, solutions, and sequence of events (plot)</p> <p>b. describe the main characters in works of fiction, including their traits, motivations, and feelings</p> <p>c. identify and explain the big idea or moral lesson as themes in well-known fables, legends, myths, or stories</p> <p>d. compare and contrast different versions of the same story in traditional and contemporary folktales with respect to their characters, settings, and sequence of events</p>	<p>a. summarize and sequence the events/plot and explain how past events impact future events</p> <p>b. describe the personality traits of characters from the thoughts, words, and actions that reveal their personalities</p> <p>c. describe the interaction of characters, including relationships and how they change</p> <p>d. paraphrase the big idea/themes and supporting details of fables, legends, myths, or stories</p> <p>e. compare and contrast the key elements in myths and traditional folktales</p>	<p>a. summarize and sequence the events/plot, and explain how past events impact future events, and identify the theme</p> <p>b. describe the personality traits of characters from the thoughts, words, and actions that reveal their personalities</p> <p>c. describe the interaction of characters, including relationships and how they change</p> <p>d. compare and contrast the adventures or exploits of characters and their roles in traditional and classical literature</p>	<p>a. compare and contrast the roles and functions of characters in various plots, their relationships, and their conflicts</p> <p>b. explain the theme or moral lesson in fictional stories from various cultures</p> <p>c. identify and describe the conflict and resolution in a story or novel</p> <p>d. describe how a narrator's or speaker's point of view influences events</p> <p>e. identify the differences between fantasies, historical fiction, and true adventure stories</p> <p>f. recognize foreshadowing</p>	
Fiction		6-12 Correlation Reading Literary 1A					

Reading

2							Develop and apply skills and strategies to comprehend, analyze and evaluate fiction, poetry and drama from a variety of cultures and times.						
		Grade K		Grade 1		Grade 2		Grade 3		Grade 4		Grade 5	
A (cont'd)		i. describe characters in a story and the reasons for their actions				e. describe cause and effect relationships		f. identify differences between fables, folk tales, legends, and myths		e. compare and contrast the point of view from which stories are narrated and explain whether the narrator or speaker of a story is first or third person		g. explain the effect of a historical event or movement in a work of literature	
Fiction 6-12 Correlation Reading Literary 1A		j. discuss the main idea of a well-known folktale or fable				f. identify and explain first and third person narration		g. explain cause and effect relationships		f. explain differences and similarities between American tall tales, mysteries, science fiction, and adventure stories		h. introduce origin myths, and acquire knowledge of culturally significant characters and events in Greek, Roman, and Norse mythology	
						g. compare and contrast the differences in points of view of characters and how stories are narrated		h. distinguish their own point of view from that of the narrator or those of the characters				i. introduce different forms of third-person points of view in stories	

Reading

2	Develop and apply skills and strategies to comprehend, analyze and evaluate fiction, poetry and drama from a variety of cultures and times					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B	With assistance, read, infer and draw conclusions to:	With assistance, read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:
Poetry 6-12 Correlation Reading Literary 1A, 2A, 2C	a. respond to rhythm and rhyme through identifying a regular beat and similarities in word sounds	a. respond to rhythm, rhyme and alliteration through identifying a regular beat and similarities in word sounds	a. produce examples of rhythm and rhyme b. describe how rhythm, rhyme, and repetition create imagery in poetry c. identify and use onomatopoeia	a. identify and use examples of alliteration b. identify basic forms of poetry	a. explain structural elements of poetry	a. explain sound elements and visual elements b. identify forms of poems c. explain how poets use sound effects in humorous poems

Reading

2		Develop and apply skills and strategies to comprehend, analyze and evaluate fiction, poetry and drama from a variety of cultures and times.					
		Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C	With assistance, read, infer and draw conclusions to:	With assistance, read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:
	a. identify characters in a puppet play or performance by actors	a. identify characters and dialogue in plays or performances by actors b. recognize sensory details in literary texts	a. identify characters, setting, acts, and scenes in plays b. identify the elements of dialogue and use them in informal plays	a. explain the elements of plot, setting, and character as presented through dialogue in scripts that are read or viewed b. identify language that creates a graphic visual experience and appeals to the senses	a. analyze how characters change from the beginning to the end of a play or film b. explain structural elements of dramatic literature	a. analyze the similarities between an original text and its dramatic adaptation b. identify structural elements of dramatic literature c. evaluate the critical impact of sensory details, imagery, and figurative language	
Drama							
6-12 Correlation Reading Literary 1A, 2A, 2C							

Reading

3 Develop and apply skills and strategies to comprehend, analyze and evaluate nonfiction (e.g., narrative, information/explanatory, opinion, persuasive, argumentative) from a variety of cultures and times.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	With assistance, read, infer and draw conclusions to:	With assistance, read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:
Text Features 6-12 Correlation Reading Informational 1A, 1C	a. identify the topic and details in an expository text heard and/or read referring to the words and/or illustrations	a. use text features to restate the main idea	a. identify the main idea of a section of text and distinguish it from the topic	a. explain the author's purpose	a. use multiple text features to locate information and gain an overview of the contents of text	a. use multiple text features and graphics to locate information and gain an overview of the contents of text information
	b. use titles and illustrations to make predictions about text	b. explain facts or details using text features and distinguish between what facts were provided by pictures and what facts were conveyed via words	b. demonstrate understanding by locating facts to answer and/or ask questions	b. identify the details or facts that support the main idea	b. describe the sequence of events, ideas, concepts, or steps needed to carry out a procedure	b. interpret details from procedural text to complete a task, solve a problem, or perform an action
	c. identify text features	c. use text features to locate specific information in text	c. use text features to locate specific information	c. draw conclusions and support with textual evidence	c. interpret and explain factual information presented graphically	c. interpret details from procedural text to complete a task, solve a problem, or perform an action
	d. identify the meaning of specific signs	d. follow written multi-step directions with picture cues to assist with understanding	d. explain common graphic features to assist in the interpretation of text	d. use text and graphic features to locate information and to make and verify predictions		c. interpret factual or quantitative information
		e. explain the meaning of specific signs and symbols	e. follow written multi-step directions	e. follow and explain a set of written multi-step directions		
			f. identify the topic of each paragraph in a multi-paragraph text	f. describe the relationship between events, ideas, concepts or steps, using appropriate language		
			g. describe connections between, and state the order of, the events or ideas			

Reading

3						
Develop and apply skills and strategies to comprehend, analyze and evaluate nonfiction (e.g. narrative, information/explanatory, opinion, persuasive, argumentative) from a variety of cultures and times.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B	With assistance, read, infer and draw conclusions to:	With assistance, read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:
Literary Techniques 6-12 Correlation Reading Informational 1D, 2D, 2B, 2C	<ul style="list-style-type: none"> a. respond to examples of sensory details 	<ul style="list-style-type: none"> a. determine whether a story is fiction or nonfiction and explain why b. identify examples of sensory details in stories or poems 	<ul style="list-style-type: none"> a. distinguish between fiction and nonfiction b. ask and answer questions to clarify meaning c. identify the main idea with supporting facts d. explain examples of sensory details in stories and poems 	<ul style="list-style-type: none"> a. distinguish the difference between a biography and an autobiography b. distinguish fact from opinion c. distinguish point of view from what the author is trying to persuade the reader to think or do d. identify and explain examples of sound devices, literal and nonliteral meanings, and figurative language 	<ul style="list-style-type: none"> a. summarize the main idea and give supporting details while maintaining meaning b. explain similarities and differences between the events and characters' experiences in a fictional work and the actual events and experiences described in an author's biography or autobiography c. analyze, make inferences, and draw conclusions about persuasive text; use evidence from the text to explain the author's purpose; and support the analysis 	<ul style="list-style-type: none"> a. evaluate if the author's purpose was achieved, identify reasons for the decision, and provide evidence to support the claim b. analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent c. determine and verify facts through established methods d. identify the author's viewpoint or position, supporting premises and evidence, and conclusion of a persuasive argument

Reading

3	Develop and apply skills and strategies to comprehend, analyze and evaluate nonfiction (e.g. narrative, information/explanatory, opinion, persuasive, argumentative) from a variety of cultures and times.					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B (cont'd)					d. explain how an author uses language to present information to influence what the reader thinks or does e. choose words and phrases to convey ideas precisely	e. recognize exaggerated, contradictory, or misleading statements f. identify the type of evidence used to support a claim in a persuasive text g. use reasoning to determine the logic of an author's conclusion and provide evidence to support reasoning
Literary Techniques 6-12 Correlation Reading Informational 1D, 2D, 2B, 2C						

Reading

3 Develop and apply skills and strategies to comprehend, analyze and evaluate nonfiction (e.g. narrative, information/explanatory, opinion, persuasive, argumentative) from a variety of cultures and times.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C	With assistance, read, infer and draw conclusions to:	With assistance, read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:	Read, infer and draw conclusions to:
	<ul style="list-style-type: none"> a. ask questions to clarify meaning b. answer questions c. recognize important information and identify supporting details d. identify basic similarities and differences between two texts on the same topic e. name the main topic and recall key details of the text f. ask and answer questions about unknown words in a text 	<ul style="list-style-type: none"> a. ask and answer questions to clarify meaning b. identify main ideas and provide support c. describe the connection between two individuals, events, ideas, or pieces of information in a text d. identify the reasons an author gives to support points in a text e. identify similarities and differences between texts on the same topic 	<ul style="list-style-type: none"> a. explain main ideas and supporting details b. describe the connection between events and retell the sequence of events c. describe the connection between and identify problems and solutions d. identify the author's purpose e. compare and contrast the most important points presented by text on the same topic 	<ul style="list-style-type: none"> a. describe relationships among events, ideas, concepts, and cause and effect in texts b. describe and explain the relationship between problems and solutions c. use information gained from illustrations and words to demonstrate understanding of the text d. compare and contrast the most important points and key details presented in texts on the same topic 	<ul style="list-style-type: none"> a. draw inferences from the text referring to evidence in the text b. distinguish fact from opinion in a text and explain how to verify what is a fact c. explain explicit and implicit relationships among ideas in texts d. explain the author's purpose e. identify and explain time order sequence f. compare and contrast a firsthand and secondhand account of the same event or topic 	<ul style="list-style-type: none"> a. quote accurately when explaining the text and drawing inferences b. identify devices used in biographies and autobiographies, including how an author presents major events in a person's life c. explain the difference between a stated and implied purpose for an expository text d. analyze how the pattern of organization of a text influences the relationships of the ideas
Text Structures 6-12 Correlation Reading Informational 2A						

Reading

3	Develop and apply skills and strategies to comprehend, analyze and evaluate nonfiction (e.g. narrative, information/explanatory, opinion, persuasive, argumentative) from a variety of cultures and times.					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C (cont'd)						e. analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent
Text Structures 6-12 Correlation Reading Informational 2A						f. explain the basic relationships among ideas in the argument g. integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably

Reading

4 Comprehend and analyze words, images, graphics, and sounds in various media and digital forms to impact meaning.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	With assistance, develop an awareness of media literacy by:	With assistance, develop an awareness of media literacy by:	Read to develop an understanding of media and it's components by:	Read to develop an understanding of media and it's components by:	Read to develop an understanding of media and it's components by:	Read to develop an understanding of media and it's components by:
	<ul style="list-style-type: none"> a. identifying different forms of media b. identifying techniques used in media 	<ul style="list-style-type: none"> a. distinguishing purposes of media b. identifying and explaining techniques used in media 	<ul style="list-style-type: none"> a. explaining purposes of media b. describing techniques used to create media messages c. identifying various written conventions for using digital media 	<ul style="list-style-type: none"> a. understanding how communication changes when moving from one genre of media to another b. explaining how various design techniques used in media influence the message c. comparing various written conventions used for digital media d. identifying text structures and graphics features of a web page 	<ul style="list-style-type: none"> a. explaining the positive and negative impacts of advertisement techniques used in various genres of media to impact consumer behavior b. explaining how various design techniques used in media influence the message c. comparing various written conventions used for digital media d. identifying and explaining text structures and graphics features of a web page and how they help readers to comprehend text 	<ul style="list-style-type: none"> a. explaining how messages conveyed in various forms of media are presented differently b. comparing and contrasting the difference in techniques used in media c. identifying the point of view of media presentations d. analyzing various digital media venues for levels of formality and informality e. explaining textual and graphics features of a web page and how they help readers to comprehend text
Digital and Media Literacy 6-12 Correlation Reading Literacy 3A						

Reading Foundations

1 Understand how English is written and read (Start of Reading Foundations).						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Develop print awareness in the reading process by:	Develop print awareness in the reading process by:	Develop print awareness in the reading process by:			
	<ul style="list-style-type: none"> a. identifying all upper and lower case letters b. sequencing the letters of the alphabet c. demonstrating that books are read left to right, top to bottom d. identifying parts of a book e. demonstrating that written words are made up of different letters f. knowing that a sentence is comprised of a group of words separated by spaces 	<ul style="list-style-type: none"> a. recognizing that sentences are comprised of words separated by spaces b. identifying parts of a book c. recognizing that spoken words are represented in English by letters written in specific sequences d. recognizing the distinguishing features of a sentence 	<ul style="list-style-type: none"> a. understanding that sentences are organized into paragraphs to convey meaning b. identifying and using table of contents and glossary 	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> Continue to address earlier standards as needed and as applies to more difficult texts. </div>		
Print Awareness No 6-12 Correlation						

Reading Foundations

1	Understand how English is written and read. (Start of Reading Foundations)					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A (cont'd)	g. demonstrating one-to-one correspondence between spoken words and written words h. recognizing that spoken words can be represented by print for communication					
Print Awareness No 6-12 Correlation						

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Reading Foundations

2 Understand how English is written and read.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A Phonemic Awareness No 6-12 Correlation	Develop phonemic awareness in the reading process by:	Develop phonemic awareness in the reading process by:				
	a. identifying sounds in spoken words b. producing rhymes in response to spoken words c. distinguishing orally presented rhyming pairs of words from non-rhyming pairs d. recognizing spoken alliteration or groups of words that begin with the same onset or initial sound e. blending spoken onsets and rimes to form simple words f. blending spoken phonemes to form one syllable words g. isolating the initial, medial and final sounds in one syllable spoken words h. segmenting spoken one syllable words into 2 or 3 phonemes	a. producing and identifying sounds and syllables in spoken words b. producing a series of rhyming words using a variety of phonograms and consonant blends c. distinguishing between long and short vowel sounds d. recognizing the change in a spoken word when a specific phoneme is added, changed, or removed e. blending spoken phonemes to form 1 or 2 syllable words including consonant blends f. segmenting spoken 1 syllable words of 3 - 5 phonemes into individual phonemes				
				Continue to address earlier standards as needed and as applies to more difficult texts.		

Reading Foundations

3 Understand how English is written and read.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Develop phonics in the reading process by:	Develop phonics in the reading process by:	Develop phonics in the reading process by:	Develop phonics in the reading process by:	Develop phonics in the reading process by:	Develop phonics in the reading process by:
Phonics No 6-12 Correlation	<ul style="list-style-type: none"> a. producing sounds of letters b. writing letter(s) for most short vowel and consonant sounds c. identifying and reading high frequency words d. blending letter sounds to decode simple CVC words e. recognizing that new words can be created when letters are changed, added, or deleted and using letter sound knowledge to write simple messages and words which accurately represent at least the initial sound 	<ul style="list-style-type: none"> a. decoding words in context by using letter sound knowledge for single letters b. identifying single letters for the spelling of short and long vowels c. identifying and producing consonant blends d. identifying and producing consonant digraphs e. identifying and decoding words with vowel digraphs f. identifying and decoding words with vowel diphthongs g. combining sounds from letters and common spelling patterns to create and decode recognizable words 	<ul style="list-style-type: none"> a. decoding multisyllabic words in context by applying common letter-sound correspondences including: single letters, consonant blends, consonant and vowel digraphs and vowel diphthongs b. distinguishing long and short vowels when reading regularly spelled one syllable words c. decoding regularly spelled two syllable words with long vowels d. using common syllable patterns to decode words e. decoding words by common spelling patterns 	<ul style="list-style-type: none"> a. decoding multisyllabic words in context, and independent of context, by applying common spelling patterns including: dropping the final "e" and add endings such as <i>-ing</i>, <i>-ed</i>, or <i>-able</i> b. decoding words that double final consonants when adding an ending c. changing the final "y" to "i" d. knowing the meaning of common prefixes and suffixes e. knowing the meaning of derivational affixes f. knowing the meaning of homophones g. using common syllable patterns to decode words 	<ul style="list-style-type: none"> a. decoding words using knowledge of all letter-sound correspondences, syllabication patterns, and morphology to read unfamiliar multi-syllabic words in context b. reading root words, prefixes, and suffixes and important words from specific content curricula 	<ul style="list-style-type: none"> a. decoding words using knowledge of all letter-sound correspondences, syllabication patterns, and morphology to read unfamiliar multi-syllabic words in context b. reading root words, prefixes, and suffixes and important words from all specific content curricula
						Continue to address earlier standards as needed and as applies to more difficult texts.

Reading Foundations

3 Understand how English is written and read.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A (cont'd)		<ul style="list-style-type: none"> h. recognizing and using syllabication patterns to decode words including: CVC , CV, VCe final stable syllable, vowel diphthong and digraphs, r-controlled vowels including er, ir, ur, ar, and or i. recognizing and reading irregularly spelled words j. decoding words in word families k. reading root words with inflectional endings l. reading simple compound words m. identifying and reading contractions n. reading high frequency words o. demonstrating decoding skills when reading new words 	<ul style="list-style-type: none"> f. reading words with common prefixes and suffixes g. identifying and reading abbreviations h. identifying, defining, and reading and using contractions i. identifying and reading irregularly spelled high-frequency words j. demonstrating decoding skills when reading new words in a text 	<ul style="list-style-type: none"> h. decoding words by spelling patterns i. reading irregularly spelled high frequency words j. demonstrating decoding skills when reading new words 		
Phonics No 6-12 Correlation						

Reading Foundations

4 Understand how English is written and read.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Read with support, appropriate texts with purpose and understanding	Orally read grade-appropriate texts with fluency (rate, accuracy, expression, appropriate phrasing) and comprehension	Orally read grade-appropriate texts with fluency (rate, accuracy, expression, appropriate phrasing) and comprehension	Orally read grade-appropriate texts with fluency (rate, accuracy, expression, appropriate phrasing) and comprehension	Orally read grade-appropriate texts with fluency (rate, accuracy, expression, appropriate phrasing) and comprehension	Orally read grade-appropriate texts with fluency (rate, accuracy, expression, appropriate phrasing) and comprehension
Fluency No 6-12 Correlation		a. use context to confirm or self-correct word recognition and understanding, rereading as necessary	a. use context to confirm or self-correct word recognition and understanding, rereading as necessary	a. use context to confirm or self-correct word recognition and understanding, rereading as necessary	a. use context to confirm or self-correct word recognition and understanding, rereading as necessary	a. use context to confirm or self-correct word recognition and understanding, rereading as necessary

Writing

1 Apply a writing process to develop a text for audience and purpose.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Follow a writing process, with assistance, to generate a writing plan through:	Follow a writing process, with assistance, to plan a first draft by:	Follow a writing process, to plan a first draft by:	Follow a writing process to plan a first draft by:	Follow a writing process to plan a first draft by:	Follow a writing process to plan a first draft by:
Prewriting 6-12 Correlation Writing 2A	<ul style="list-style-type: none"> a. using pictures, oral language or written letters, and/or words 	<ul style="list-style-type: none"> a. brainstorming and recording key ideas 	<ul style="list-style-type: none"> a. brainstorming and recording key ideas using a graphic organizer 	<ul style="list-style-type: none"> a. using a simple pre-writing strategy when given the purpose and the intended audience 	<ul style="list-style-type: none"> a. selecting a genre appropriate for conveying the purpose to an intended audience b. formulating questions related to the topic c. accessing prior knowledge or building background knowledge related to the topic d. using a pre-writing strategy 	<ul style="list-style-type: none"> a. selecting a genre appropriate for conveying the purpose to an intended audience b. formulating questions related to the topic c. accessing prior knowledge or building background knowledge related to the topic d. using a prewriting strategy

Writing

1 Apply a writing process to develop a text for audience and purpose.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B	Appropriate to genre type, develop a draft from prewriting by:	Appropriate to genre type, develop a draft from prewriting by:	According to genre type, develop a draft from prewriting by:	Appropriate to genre type, develop a draft from prewriting by:	Appropriate to genre type, develop a draft from prewriting by:	Appropriate to genre type, develop a draft from prewriting by:
Draft 6-12 Correlation Writing 2A	a. sequencing the actions or details through letters, words, and pictures	a. sequencing ideas into sentences and generating a single paragraph with one main idea b. generating evidence of a simple opening and simple closing	a. sequencing ideas into clear and coherent sentences b. generating paragraphs with one main idea c. creating evidence of a beginning, middle and end d. addressing an appropriate audience	a. generating a main idea to support a multiple paragraph text using a variety of sentence types, including imperative and exclamatory b. supporting the topic sentences within each paragraph with facts and details (from sources when appropriate) c. categorizing, organizing, and sequencing the supporting details into a text with a clear beginning, middle, and end d. addressing an appropriate audience	a. generating a main idea to support a multiple paragraph text, using a variety of sentence types, including compound b. establishing and supporting a main idea with an overall topic sentence at, or near, the beginning of the first paragraph c. categorizing, organizing, and sequencing facts, details, and/or events into a text (from sources when appropriate) into clear introductory, supporting, and concluding paragraphs d. addressing an appropriate audience	a. choosing an appropriate organizational structure and building on one main idea to create a multiple paragraph text appropriate to the genre b. establishing and supporting a main idea with an overall topic sentence at, or near, the beginning of the first paragraph c. categorizing, organizing, and sequencing facts, details, and/or events (from sources when appropriate) into clear introductory, supporting, and concluding paragraphs applicable to the organizational structure
	<i>Note: Refer to Grade K, W2A-C genre specific standards.</i>	<i>Note: Refer to Grade 1, W2A-C genre specific standards.</i>	<i>Note: Refer to Grade 2, W2A-C genre specific standards.</i>	<i>Note: Refer to Grade 3, W2A-C genre specific standards.</i>	<i>Note: Refer to Grade 4, W2A-C genre specific standards.</i>	

Writing

1	Apply a writing process to develop a text for audience and purpose.					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B (cont'd)						d. restating the overall main idea in the concluding statement e. addressing an appropriate audience, organization, and purpose
Draft 6-12 Correlation Writing 2A						<i>Note: Refer to Grade 5, W2A-C genre specific standards.</i>

Writing

1 Apply a writing process to develop a text for audience and purpose.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C	Reread, revise, and edit drafts, with assistance from adults/peers, to:	Reread, revise and edit drafts, with assistance from adults/peers, to:	Reread, revise and edit drafts with assistance from adults/peers, to:	Reread, revise and edit drafts with assistance from adults/peers, to:	Reread, revise and edit drafts with assistance to:	Reread, revise, and edit drafts with assistance to:
Revise/Edit 6-12 Correlation Writing 3A	<p>a. edit by leaving spaces between letters and words in a sentence</p> <p>b. respond to questions and suggestions, adding details to strengthen writing</p>	<p>a. edit by leaving spaces between letters and words in sentences</p> <p>b. edit for language conventions</p> <p>c. respond to questions and suggestions, clarifying meaning by adding details to sentence construction and strengthening writing</p>	<p>a. edit for language conventions</p> <p>b. strengthen writing as needed by revising</p> <ul style="list-style-type: none"> • main idea • details • word choice • sentence construction • event order • audience • voice 	<p>a. edit for language conventions</p> <p>b. develop and strengthen writing by revising</p> <ul style="list-style-type: none"> • main idea • sequence (ideas) • focus • beginning/middle/end • details/facts (from sources, when appropriate) • word choice (related to the topic) • sentence structure • transitions • audience and purpose • voice 	<p>a. edit for language conventions</p> <p>b. develop and strengthen writing by revising</p> <ul style="list-style-type: none"> • main idea • sequence (ideas) • focus • beginning/middle/end • details/facts (from multiple sources, when appropriate) • word choice (related to the topic) • sentence structure • transitions • audience and purpose • voice 	<p>a. edit for language conventions</p> <p>b. develop and strengthen writing by revising</p> <ul style="list-style-type: none"> • main idea • sequence (ideas) • focus • organizational structure • details/facts (from multiple sources, when appropriate) • word choice (related to the topic) • sentence structure • transitions • audience and purpose • voice

Writing

1 Apply a writing process to develop a text for audience and purpose.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
D	With assistance from adults/peers:	With assistance from adults/peers:	With assistance from adults/peers:	With assistance from adults/peers:	With assistance from adults/peers:	With assistance from adults/peers:
Produce/Publish and Share Writing 6-12 Correlation Writing 2A	a. explore a variety of conventional/digital tools to produce and publish writing	a. use a variety of conventional/digital tools to produce and publish writing	a. use a variety of conventional/digital tools to produce and publish writing b. introduce keyboarding skills	a. use a variety of conventional tools and technology (including keyboarding skills) to produce and publish writing as well as to interact and collaborate with others	a. use technology, including the Internet, to produce and publish writing b. demonstrate sufficient command of keyboarding skills to type a minimum of one page, ideally in a single sitting	a. use technology, including the Internet, to produce and publish writing b. demonstrate sufficient command of keyboarding skills to type a minimum of two pages, ideally in a single sitting
	<i>Note: Refer to Grade K, W2A-C genre specific standards.</i>	<i>Note: Refer to Grade 1, W2A-C genre specific standards.</i>	<i>Note: Refer to Grade 2, W2A-C genre specific standards.</i>	<i>Note: Refer to Grade 3, W2A-C genre specific standards.</i>	<i>Note: Refer to Grade 4, W2A-C genre specific standards.</i>	<i>Note: Refer to Grade 5, W2A-C genre specific standards.</i>

Writing

2 Compose well-developed writing texts for audience and purpose.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	With assistance, draw/write opinion texts that:	With assistance, write opinion texts that:	Write opinion texts that:	Write opinion texts that:	Write opinion texts that:	Write opinion texts that:
	<p>a. use a combination of drawing, writing and dictation to tell an opinion about a topic or text being studied</p> <p>b. give logical reasons for suggesting that others follow a particular course of action or line of thinking</p> <p>c. use words that are related to the topic</p>	<p>a. introduce a topic or text being studied</p> <p>b. state an opinion about the topic or text and provide a reason for the opinion</p> <p>c. use some specific words that are related to the topic</p> <p>d. follow a sense of order in writing</p> <p>e. provide some sense of closure</p>	<p>a. introduce a topic or text being studied using complete sentences</p> <p>b. state an opinion about the topic or text and provide reasons for the opinion</p> <p>c. use specific words that are related to the topic and audience</p> <p>d. use linking/transition words and phrases to signal event order</p> <p>e. provide evidence of a beginning, middle and concluding statement or section</p>	<p>a. introduce a topic or text being studied, using connected sentences</p> <p>b. state an opinion or establish a position and provide reasons for the opinion/position</p> <p>c. use specific and accurate words that are related to the topic, audience, and purpose</p> <p>d. contain information using student's original language, except when using direct quotation from a source</p> <p>e. reference the name of the author(s) or name of the source used for details or facts included in the text</p>	<p>a. introduce a topic or text being studied using an introductory paragraph</p> <p>b. state an opinion or establish a position and provide reasons for the opinion/position, supported by facts and details</p> <p>c. use specific and accurate words that are related to the topic, audience and purpose</p> <p>d. contain information using student's original language, except when using direct quotation from a source</p> <p>e. reference the name of the author(s) or name of the source used for details or facts included in the text</p>	<p>a. introduce a topic or text being studied using an introductory paragraph that clearly supports the writer's purpose</p> <p>b. state an opinion or establish a position and provide relevant reasons for the opinion supported by multiple facts and details</p> <p>c. use specific and accurate words that are related to the topic, audience, and purpose</p> <p>d. contain information using student's original language, except when using direct quotation from a source</p> <p>e. reference the name of the author(s) or name of the source used for details or facts included in the text</p>
Opinion/Argumentative 6-12 Correlation Writing 2A						

Writing

2	Compose well-developed writing texts for audience and purpose.					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A (cont'd)				f. use transitions to connect opinion and reason g. provide clear evidence of a beginning, middle and a concluding statement or paragraph	f. use transitions to connect opinion and reason g. organize the supporting details/reasons into introductory, supporting, and concluding paragraphs	f. use transitions to connect opinion and reason g. organize the supporting details/reasons into introductory, supporting, and concluding paragraphs
Opinion/Argumentative 6-12 Correlation Writing 2A						

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Writing

2 Compose well-developed writing texts for audience and purpose.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B	With assistance, draw or write informative/explanatory texts that:	With assistance, write informative/explanatory texts that:	Write informative/explanatory texts that:	Write informative/explanatory texts that:	Write informative/explanatory texts that:	Write informative/explanatory texts that:
Informative/Explanatory 6-12 Correlation Writing 2A	<p>a. use a combination of drawing, writing, and dictation to name and inform about a topic or a text they are learning in school</p> <p>b. use words that are related to the topic</p>	<p>a. introduce a topic or text being studied</p> <p>b. supply some facts about the topic to create a paragraph</p> <p>c. use some specific words that are related to the topic</p> <p>d. follow a sense of order in writing</p> <p>e. create some sense of closure</p>	<p>a. introduce a topic or text being studied, using complete sentences</p> <p>b. use facts and definitions to develop points in generating paragraphs</p> <p>c. use specific words that are related to the topic and audience</p> <p>d. use linking words and phrases to signal event order</p> <p>e. create a concluding statement or paragraph</p>	<p>a. introduce a topic or text being studied</p> <p>b. develop the topic with simple facts, definitions, details, and explanations</p> <p>c. use specific, and relevant, words that are related to the topic, audience and purpose</p> <p>d. uses the student's original language, except when quoting from a source</p> <p>e. use transition words to connect ideas within categories of information</p> <p>f. create a concluding statement or paragraph</p>	<p>a. introduce a topic using a topic sentence in an introductory paragraph</p> <p>b. develop the topic into supporting paragraphs from sources, using topic sentences with facts, details, examples, and quotations</p> <p>c. use specific, relevant and accurate words that are suited to the topic, audience, and purpose</p> <p>d. contain information using student's original language, except when using direct quotations from a source</p> <p>e. use transitions to connect categories of information</p> <p>f. use text structures when useful</p>	<p>a. introduce a topic using a topic sentence in an introductory paragraph</p> <p>b. develop the topic into supporting paragraphs from sources, using topic sentences with facts, details, examples, and quotations</p> <p>c. use an organizational format that suits the topic</p> <p>d. use specific, relevant, and accurate words that are suited to the topic, audience, and purpose</p> <p>e. contain information using student's original language, except when using direct quotations from a source</p>

Writing

2	Compose well-developed writing texts for audience and purpose.					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B (cont'd)					g. create a concluding paragraph related to the information	f. use transition words to connect ideas within and across categories of information g. use text structures when useful h. create a concluding paragraph related to the information
Informative/Explanatory 6-12 Correlation Writing 2A						

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Writing

2 Compose well-developed writing texts for audience and purpose.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C	With assistance, draw or write fiction or non-fiction narratives and poems that:	With assistance, draw or write fiction or non-fiction narratives and poems that:	Write fiction or non-fiction narratives and poems that:	Write fiction or non-fiction narratives and poems that:	Write fiction or non-fiction narratives and poems that:	Write fiction or non-fiction narratives and poems that:
	<ul style="list-style-type: none"> a. use a combination of drawing, writing and dictation to narrate a story or experience the student has had or has imagined b. tell the reader about a character or personal event c. place events in the order they occurred d. use words that are related to the topic e. provide a reaction to what happened in the events 	<ul style="list-style-type: none"> a. use a combination of illustration, writing, and dictation to narrate a story or experience b. use details to describe the story or experience c. place events in the order they occurred d. use linking words to indicate beginning/middle/end e. use words that are related to the topic f. provide a reaction to what happened in the events 	<ul style="list-style-type: none"> a. establish a situation/topic based on the student's experience or imagination b. introduce a main character c. establish a setting d. develop sensory details e. follow a logical sequence of events using complete sentences to create a beginning/middle/end f. use linking/transition words to signal event order g. use specific words that are related to the topic and audience 	<ul style="list-style-type: none"> a. establish a situation/topic and introduce a narrator and/or characters b. use narrative techniques, such as dialogue and descriptions c. establish an appropriate setting d. organize an event sequence to establish a beginning/middle/end e. use transition words and phrases to signal event order f. use specific and relevant words that are related to the topic, audience, and purpose 	<ul style="list-style-type: none"> a. establish a situation/topic and introduce a narrator and/or characters b. use narrative techniques, such as dialogue, motivation and descriptions c. establish an appropriate setting d. organize an event sequence that unfolds naturally to establish a beginning/middle/end e. use a variety of transitions to manage the sequence of events f. use specific, relevant and accurate words that are suited to the topic, audience, and purpose 	<ul style="list-style-type: none"> a. establish a situation/topic and introduce a narrator and/or characters b. use narrative techniques, such as dialogue, motivation, and descriptions c. establish an appropriate setting d. organize an event sequence that unfolds naturally to establish a beginning/middle/end e. use a variety of transitions to manage the sequence of events f. use specific, relevant, and accurate words that are suited to the topic, audience, and purpose
Narrative/Literary 6-12 Correlation Writing 2A						

Writing

3 Gather, analyze, evaluate and use information from a variety of sources.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	With assistance, apply research process to:	With assistance, apply research process to:	With assistance, apply research process to:	Apply research process to:	Apply research process to:	Apply research process to:
Research Process 6-12 Correlation Writing 1A	<ul style="list-style-type: none"> a. generate a list of open-ended questions about topics of class interest b. decide what sources or people in the classroom, school, library, or home can answer their questions c. gather evidence from sources d. use pictures in conjunction with writing when documenting research 	<ul style="list-style-type: none"> a. generate a list of open-ended questions about topics of interest b. decide what sources of information might be relevant to answer these questions c. gather personal and natural evidence from available sources, as well as from interviews with local experts d. organize information found during group or individual research, using graphic organizers or other aids e. make informal presentations of information gathered 	<ul style="list-style-type: none"> a. generate a list of open-ended questions about topics of interest b. create an individual question about one of the topics c. use their own question to find information on their topic d. gather evidence from available sources e. record basic information in simple visual format f. draw evidence from literary or informational texts g. summarize information using their own words 	<ul style="list-style-type: none"> a. generate a list of subject appropriate topics b. create an individual question about one of the topics c. decide what sources of information might be relevant to answer these questions d. locate information in reference texts, electronic resources, interviews, or visual sources e. draw evidence from literary or informational texts f. determine the accuracy and relevance of the information related to a selected question g. take simple notes and sort evidence into provided categories or organizer h. record relevant information in own words 	<ul style="list-style-type: none"> a. generate a list of subject appropriate topics b. create a research question to address relevant to a chosen topic c. identify a variety of relevant sources d. use organizational features of print and digital sources efficiently to locate information e. draw evidence from literary or informational texts* f. convert graphic/visual data into written notes g. determine the accuracy of the information gathered h. differentiate between paraphrasing and plagiarism when using ideas of others i. record pertinent source information using a variety of tools j. restate information in own words 	<ul style="list-style-type: none"> a. generate a list of subject appropriate topics b. formulate and refine, if necessary, an open-ended researchable question guided by answers to a secondary set of questions c. follow guidelines for collecting and recording information d. identify and acquire information from at least three sources e. select relevant resources using organizational features of reference texts, knowledge of how information is linked on websites, and knowledge of differences between primary and secondary sources f. draw evidence from literary or informational texts

Writing

3		Gather, analyze, evaluate and use information from a variety of sources.					
		Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A (cont'd)			f. self-evaluate using previously established teacher criteria	h. present and evaluate information in written and oral reports or displays, using previously established teacher criteria	i. use quotation marks to denote direct quotations when recording specific words and sentences from a source j. create a resource page from notes, including the author, title, publisher and publication year for each source k. present and evaluate the information in a report or annotated display, using previously established teacher/student criteria	k. use appropriate citations within the research paper l. record bibliographic information from sources according to a standard format m. present and evaluate how completely, accurately, and efficiently the research question was explored or answered using previously established teacher/student criteria	g. assess relevance, accuracy, and reliability of information in print and digital sources h. convert graphic/visual data into written notes i. differentiate between paraphrasing and plagiarism when using ideas of others restate information in own words j. present and evaluate how completely, accurately, and efficiently the research question was explored or answered using previously established teacher/student criteria
Research Process 6-12 Correlation Writing 1A							

Writing

3	Gather, analyze, evaluate and use information from a variety of sources					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A (cont'd)						<ul style="list-style-type: none"> k. record pertinent source information using a variety of tools l. use appropriate citations within the research paper m. record bibliographic information from sources according to a standard format n. present and evaluate how completely, accurately, and efficiently, the research question was explored or answered using previously established criteria
Research Process 6-12 Correlation Writing 1A						

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Language

1 Communicate using conventions of English language.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	In speech and written form, apply standard English grammar to:	In speech and written form, apply standard English grammar to:	In speech and written form, apply standard English grammar to:	In speech and written form, apply standard English grammar to:	In speech and written form, apply standard English grammar to:	In speech and written form, apply standard English grammar to:
Grammar 6-12 Correlation Writing 3A	<ul style="list-style-type: none"> a. print in upper and lower case letters b. identify naming words (nouns) and action words (verbs) c. use plural words when speaking d. express time and space e. demonstrate the use of complete sentences in shared language activities f. use question words in sentences 	<ul style="list-style-type: none"> a. print legibly, using correct spacing between words and sentences b. use nouns and action verbs that designate past, present, and future in sentences c. use adjectives/adverbs in sentences d. use the conjunctions and, but, and so in sentences e. use the articles a, an, and the in sentences f. use question words g. use common prepositions h. use common pronouns i. produce complete simple and compound sentences 	<ul style="list-style-type: none"> a. write legibly (print, cursive) b. identify and correctly use nouns and pronouns in writing c. use collective nouns d. use common irregular nouns e. use reflexive pronouns f. identify and use regular verbs g. identify and use helping verbs with regular verbs h. use adjectives and adverbs in sentences i. produce simple and compound declarative, imperative, exclamatory, and interrogative sentences 	<ul style="list-style-type: none"> a. write legibly (print, cursive) b. use regular and irregular verbs and simple verb tenses c. use helping verbs with irregular verbs d. identify and use complete subject and complete predicate in a sentence e. identify and use comparative and superlative, demonstrative adjectives and adverbs f. use subject/verb agreement in sentences g. use irregular “be” verbs 	<ul style="list-style-type: none"> a. write legibly b. use the “be” helping verbs with “ing” verbs c. use and order adjectives within sentences to conventional patterns d. use progressive verbs to show past, present, and future e. identify and use adverbs in writing f. use subject/verb agreement with 1st, 2nd, and 3rd person pronouns g. identify and use prepositions correctly in a sentence h. use frequently confused words correctly i. recognize the difference between and use coordinating conjunctions and subordinating conjunctions 	<ul style="list-style-type: none"> a. write legibly b. identify, explain, and use the 8 parts of speech: noun, pronoun, verb, adjective, adverb, preposition, conjunction, interjection c. identify and use relative pronouns and relative adverbs d. use pronouns consistently across a text e. identify and accurately use verb tenses f. correct verb tenses for consistency

Language

1	Communicate using conventions of English language.					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A (cont'd)				h. produce and expand imperative, exclamatory, declarative, and interrogative sentences i. identify 1 st , 2 nd , and 3 rd person pronouns and their antecedents j. identify sentence fragments and run-on sentences	j. produce and expand the complete simple and compound four types of sentences k. use pronoun antecedent agreement in sentences l. correct sentence fragments and run-on sentences in writing	
Grammar 6-12 Correlation Writing 3A						

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Language

1 Communicate using conventions of English language.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B	In written text:	In written text:	In written text:	In written text:	In written text:	In written text:
Punctuation, Capitalization, Spelling 6-12 Correlation Writing 3A	<ul style="list-style-type: none"> a. recognize that a sentence ends with punctuation marks b. capitalize own first and last name c. capitalize first word in a sentence d. capitalize the pronoun I e. write and name the printed letters that match the sound f. spell sight words g. use inventive spelling with beginning, final, and medial sounds h. write and name letters for consonant and vowel sounds i. use correct spelling of own first and last names 	<ul style="list-style-type: none"> a. identify names and use ending punctuation b. capitalize the first letter of others' first and last names c. use commas to separate single words in a series d. spell words using regular spelling patterns e. spell sight words f. spell words phonetically using phonemic awareness and spelling knowledge g. arrange words in alphabetical order, to the first letter 	<ul style="list-style-type: none"> a. use ending punctuation b. use dialogue that contains quotation marks c. use apostrophes correctly for contractions d. capitalize weeks, days, months, holidays e. capitalize abbreviated titles of people f. spell words using irregular spelling patterns g. spell and use the plural of nouns by adding <i>-s</i>, <i>-ss</i>, <i>-sh</i>, <i>-ch</i>, or <i>-x</i> h. identify and use nouns that change their spelling in plural form i. arrange words in alphabetical order, to the second letter 	<ul style="list-style-type: none"> a. use an apostrophe to form possessives b. demonstrate and use commas and quotation marks in dialogue c. capitalize dialogue correctly d. use commas for greeting and closing of a friendly letter e. capitalize names of places f. capitalize titles of books, stories, and songs g. use spelling patterns and generalizations to spell compound words h. spell words that double the consonant i. spell plural words that change 'y' to 'ies' j. consult reference materials to check and correct spellings k. arrange words in alphabetical order, to the third letter 	<ul style="list-style-type: none"> a. punctuate a dialogue between two or more characters b. insert a comma before a coordinating conjunction in a compound sentence c. capitalize proper adjectives d. use correct capitalization e. spell words with suffixes by dropping or leaving the final 'e' f. spell words ending in the long 'e' sound g. alphabetize reference sources h. use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (roots, affixes) to read and spell accurately unfamiliar multi-syllabic words in context 	<ul style="list-style-type: none"> a. use a comma before a coordinating conjunction when writing compound sentences b. use a comma to separate an introductory clause in a complex sentence c. use a comma to set off the words <i>yes</i> and <i>no</i> d. use italics when keyboarding titles of books, magazines, and newspapers e. use underlining when writing titles of books, magazines, and newspapers f. use quotation marks when writing titles of stories, songs, poems, articles g. identify and punctuate compound sentences h. identify and use apostrophes in singular nouns to show possession

Language

2	Communicate using conventions of English language.					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B (cont'd)						i. identify and write apostrophes in regular plural nouns to show possession j. use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (roots, affixes) to read and spell unfamiliar multi-syllabic words in context
Punctuation, Capitalization, Spelling 6-12 Correlation Writing 3A						

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Speaking/Listening

1 Listen for a purpose.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	<p>Develop and apply effective listening skills and strategies in formal and informal settings by:</p> <ul style="list-style-type: none"> a. following classroom listening rules b. continuing a conversation through multiple exchanges c. following one-step instructions, according to classroom expectations 	<p>Develop and apply effective listening skills and strategies in formal and informal settings by:</p> <ul style="list-style-type: none"> a. following classroom listening rules b. building on others' talk in conversations by responding to the comments of others c. following two-step instructions, according to classroom expectations 	<p>Develop and apply effective listening skills and strategies in formal and informal settings by:</p> <ul style="list-style-type: none"> a. following classroom listening rules b. following three-step instructions, according to classroom expectations 	<p>Develop and apply effective listening skills and strategies in formal and informal settings by:</p> <ul style="list-style-type: none"> a. following classroom listening rules b. asking questions to check understanding of information presented, staying on topic, and linking comments to the remarks of others c. following three-step instructions, according to classroom expectations 	<p>Develop and apply effective listening skills and strategies in formal and informal settings by:</p> <ul style="list-style-type: none"> a. following, generating, and justifying classroom listening rules b. posing and responding to specific questions to clarify or follow up on information, making comments that contribute to the discussion, and linking to the remarks of others c. following and restating multi-step instructions that involve a short related sequence of actions, according to classroom expectations 	<p>Develop and apply effective listening skills and strategies in formal and informal settings by:</p> <ul style="list-style-type: none"> a. following agreed upon rules for listening and fulfilling discussion rules independently b. posing and responding to specific questions to clarify or following up on information, and making comments that contribute to the discussion to link to the remarks of others a. following, restating, and giving multi-step instructions from or to others in collaborative groups, according to classroom expectations b. listening for speaker's message and summarizing main points based on evidence
Purpose 6-12 Correlation Speaking/Listening 1A, 1C						

Speaking/Listening

2	Listen for entertainment.					
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Develop and apply effective listening skills and strategies in formal and informal settings by:	Develop and apply effective listening skills and strategies in formal and informal settings by:	Develop and apply effective listening skills and strategies in formal and informal settings by:	Develop and apply effective listening skills and strategies in formal and informal settings by:	Develop and apply effective listening skills and strategies in formal and informal settings by:	Develop and apply effective listening skills and strategies in formal and informal setting by:
Entertainment No 6-12 Correlation	a. demonstrating active listening, according to classroom expectations	a. demonstrating active listening, according to classroom expectations	a. demonstrating active listening, according to classroom expectations	a. demonstrating active listening through body language and eye contact with the speaker, according to classroom expectations	a. generating and following active listening rules, according to classroom expectations	a. evaluating and modifying own active listening skills

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Speaking/Listening

3 Speak effectively in collaborative discussions.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Speak clearly and to the point, using conventions of language when presenting individually or with a group by:	Speak clearly and to the point, using conventions of language when presenting individually or with a group by:	Speak clearly and to the point, using conventions of language when presenting individually or with a group by:	Speak clearly and to the point, using conventions of language when presenting individually or with a group by:	Speak clearly and to the point, using conventions of language when presenting individually or with a group by:	Speak clearly and to the point, using conventions of language when presenting individually or with a group by:
Collaborative Discussions 6-12 Correlation Speaking/Listening 1A, 1C	<ul style="list-style-type: none"> a. taking turns speaking, according to classroom expectations b. continuing a conversation through multiple exchanges c. confirming comprehension by retelling information and asking appropriate questions based on read-alouds or other media 	<ul style="list-style-type: none"> a. taking turns speaking, according to classroom expectations b. building on others' talk in conversations by responding to comments of others c. confirming comprehension of read-alouds and other media by retelling and asking appropriate questions 	<ul style="list-style-type: none"> a. taking turns in discussion with a shoulder partner, according to classroom expectations b. confirming comprehension of read-alouds and independent reading by retelling and asking appropriate questions 	<ul style="list-style-type: none"> a. coming to discussions prepared, having read or studied required material; explicitly drawing on that preparation and other information known about the topic to explore ideas under discussion b. responding appropriately to discussion in a variety of settings, according to classroom expectations c. expressing opinions of read-alouds and independent reading topics 	<ul style="list-style-type: none"> a. contributing to discussion after listening to others' ideas, according to classroom expectations b. expressing opinions of read-alouds and independent reading and relating opinion to others 	<ul style="list-style-type: none"> a. summarizing points made by others before presenting own ideas, according to classroom expectations b. providing and evaluating evidence to support opinion

Speaking/Listening

4 Speak effectively when presenting.						
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Speak clearly, audibly, and to the point, using conventions of language when presenting individually or with a group by:	Speak clearly, audibly, and to the point, using conventions of language when presenting individually or with a group by:	Speak clearly, audibly and to the point, using conventions of language when presenting individually or with a group by:	Speak clearly, audibly and to the point, using conventions of language when presenting individually or with a group by:	Speak clearly, audibly and to the point, using conventions of language when presenting individually or with a group by:	Speak clearly, audibly and to the point, using conventions of language when presenting individually or with a group by:
Presenting 6-12 Correlation Speaking/Listening 2A, 2B, 2C	a. describing personal experiences using a prop, picture, or other visual aide	a. explaining a topic (student-chosen), using a prop, picture, or other visual aid, with assistance to show understanding	a. explaining a topic (student-chosen or teacher-assigned), while maintaining eye contact with audience	a. using presentation skills and/or appropriate technology	a. paraphrasing portions of a text read aloud or information presented in diverse media and formats	a. using efficient presentation skills with available resources using a variety of media
	b. reciting nursery rhymes/songs c. speaking in complete sentences	b. reciting poetry/songs with a group or individually c. using complete sentences and adjusting volume, as needed	b. recalling and telling a story with details, including a beginning, middle, and end c. using academic language and conventions	b. presenting information with clear ideas and details speaking clearly at an understandable pace c. giving an informal presentation, using a variety of media e. choosing words and phrases for effect (adjectives, action verbs, figurative language) f. using academic language and conventions	b. using efficient presentation skills with available resources c. incorporating descriptive and sequential details in a student designed or teacher assigned topic d. giving a formal presentation to classmates, using a variety of media e. speaking with expression and fluency f. adjusting formal/informal language according to context and topic	b. planning an appropriate presentation, based on audience c. employing appropriate pacing, vocabulary, and gestures to communicate a clear viewpoint

6-12 English Language Arts Grade-Level Expectations

*Missouri Department of Elementary and Secondary Education
Spring 2016*

DRAFT

Reading Literary Text

1 Comprehend and Interpret Texts (Approaching Texts as a Reader)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A	Draw conclusions, infer and analyze by citing textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Draw conclusions, infer and analyze by citing several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Draw conclusions, infer and analyze by citing the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	Draw conclusions, infer and analyze by citing relevant and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Draw conclusions, infer and analyze by citing relevant and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including where the text leaves matters uncertain.
Evidence/Inference K-5 correlation R1A, R2A, B, C,					
B	Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings using context, affixes, or reference materials.	Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings using context, affixes, or reference materials.	Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings using context, affixes, or reference materials.	Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings using context, affixes, or reference materials.	Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings using context, affixes, or reference materials.
Word Meanings K-5 correlation R1B					
C	Interpret visual elements of a text and draw conclusions from them (when applicable).	Interpret visual elements of a text and draw conclusions from them (when applicable).	Interpret visual elements of a text and draw conclusions from them (when applicable).	Interpret visual elements of a text and draw conclusions from them (when applicable).	Interpret visual elements of a text and draw conclusions from them (when applicable).
Draw Conclusions K-5 correlation R1A					

Reading Literary Text

1 Comprehend and Interpret Texts (Approaching Texts as a Reader)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
D	Using appropriate text, determine the theme(s) of a text and cite evidence of its development; summarize the text.	Using appropriate text, determine the theme(s) of a text and explain the relationship between the theme(s) and supporting evidence; summarize the text distinct from personal opinions.	Using appropriate text, determine the theme(s) of a text and analyze its development over the course of a text; provide an objective summary of the text.	Using appropriate text, determine two or more themes in a text, analyze their development throughout the text, and relate the themes to life experiences; provide an objective and concise summary of the text.	Using appropriate text, determine two or more themes in a text, analyze their development throughout the text, and relate the themes to human nature and the world; provide an objective and concise summary of the text.
Summarize/Theme K-5 correlation R2A					

2 Analyze Craft and Structure (Approaching Texts as a Writer)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A	Analyze how a particular sentence, chapter, scene, stanza, or image contributes to meaning.	Analyze how a text's form or overall structure contributes to meaning.	Analyze how an author's choice concerning a text's form or overall structure contributes to meaning.	Analyze how an author's choices concerning how to structure a text, order events, or manipulate time impact the reader.	Evaluate how an author's choices to structure specific parts of a text contribute to a text's overall meaning and its aesthetic impact.
Structure K-5 correlation R2B, R2C					

Reading Literary Text

2 Analyze Craft and Structure (Approaching Texts as a Writer)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
B Point of View No K-5 correlation	Explain how an author develops the point of view of the narrator or speaker in a text.	Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.	Analyze how differences in the points of view of the characters and the audience or reader create dramatic irony.	Analyze how points of view of is reflected in the characters, setting, and plot.	Analyze a case in which recognizing point of view requires distinguishing what is directly stated in a text from what is implied.
C Craft and Meaning K-5 correlation R2B, R2C	Analyze how word choice, including the use of figurative language and/or the repetition of words or word sounds contributes to meaning.	Analyze how specific word choices contribute to meaning and tone.	Analyze how specific word choices and sentence structures contribute to meaning and tone.	Analyze the cumulative impact of specific word choices and syntax on meaning and tone.	Evaluate how the author's word choices and use of syntax contribute to a text's overall meaning, tone and aesthetic impact.
D Interaction and Meaning K-5 correlation R2A	Describe how a particular text's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.	Analyze how the setting, characters, and plot of a text affect each other and contribute to meaning.	Analyze how literary devices are used to develop setting, reveal character, advance the plot and contribute to meaning.	Analyze how complex characters develop over the course of a text to advance the plot and develop the theme.	Evaluate the impact of the author's choices regarding how to develop and relate elements of a text.

Reading Literary Text

3 Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A	Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the same text, noting how a performance impacts personal interpretation.	Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing how the techniques unique to each medium contribute to meaning.	Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.	Analyze multiple performances of a story, drama, or poem evaluating how each version interprets the source text.	Analyze the representation of a subject in two different artistic mediums, including what is emphasized or absent in each treatment.
Text in Forms K-5 correlation R4A					
B	Compare and contrast texts in different genres that address similar themes or topics.	Compare and contrast a fictional portrayal of a time, place, or character with realistic accounts of the same subject matter.	Explain how contemporary texts make use of archetypal characters or universal themes from older or traditional texts.	Explain how and why an author alludes to or transforms source material within his or her text.	Synthesize ideas from two or more texts about similar themes or topics to articulate the complexity of the theme.
Relationships in Texts K-5 correlation R1C					
C	Explain how plot and conflict reflect historical and/or cultural contexts.	Explain how characters and settings reflect historical and/or cultural contexts.	Explain how themes reflect historical and/or cultural contexts.	Analyze how multiple texts reflect the historical and/or cultural contexts.	Evaluate how an author's work reflects his or her historical/cultural perspective.
Context K-5 correlation R2A					

Reading Literary Text

D Comprehension K-5 Correlation R1A, R1D	Read and comprehend literature, including stories, dramas and poems, independently and proficiently.	Read and comprehend literature, including stories, dramas and poems, independently and proficiently.	Read and comprehend literature, including stories, dramas and poems, independently and proficiently.	Read and comprehend literature, including stories, dramas and poems, independently and proficiently.	Read and comprehend literature, including stories, dramas and poems, independently and proficiently.

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Reading Informational Text

1 Comprehend and Interpret Texts (Approaching Texts as a Reader)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A	Draw conclusions, infer and analyze by citing textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Draw conclusions, infer and analyze by citing several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Draw conclusions, infer and analyze by citing the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	Draw conclusions, infer and analyze by citing relevant and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Draw conclusions, infer and analyze by citing relevant and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including where the text leaves matters uncertain.
B	Determine the meaning of words and phrases as they are used in the text, including figurative, connotative, and content-specific meanings using context, affixes, or reference materials.	Determine the meaning of words and phrases as they are used in the text, including figurative, connotative, and content-specific meanings using context, affixes, or reference materials.	Determine the meaning of words and phrases as they are used in the text, including figurative, connotative, and content-specific meanings using context, affixes, or reference materials.	Determine the meaning of words and phrases as they are used in the text, including figurative, connotative, and content-specific meanings using context, affixes, or reference materials.	Determine the meaning of words and phrases as they are used in the text, including figurative, connotative, and content-specific meanings using context, affixes, or reference materials.
Word Meanings K-5 correlation R1B					
C	Interpret visual elements of a text and draw conclusions from them (when applicable).	Interpret visual elements of a text and draw conclusions from them (when applicable).	Interpret visual elements of a text and draw conclusions from them (when applicable).	Interpret visual elements of a text and draw conclusions from them (when applicable).	Interpret visual elements of a text and draw conclusions from them (when applicable).
Draw Conclusions K-5 correlation R3A					

Reading Informational Text

1 Comprehend and Interpret Texts (Approaching Texts as a Reader)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
D	Explain the central/main idea(s) of a text and cite evidence of its development; summarize the text.	Explain the central/main idea(s) of a text and explain the relationship between the central idea(s) and supporting evidence; summarize the text distinct from personal opinions.	Explain the central/main idea(s) of a text and analyze its development over the course of a text; provide an objective summary of the text.	Explain two or more central/main ideas in a text, analyze their development throughout the text, and explain the significance of the central ideas; provide an objective and concise summary of the text.	Explain two or more central/main ideas in a text, analyze their development throughout the text, and relate the central ideas to human nature and the world; provide an objective and concise summary of the text.
Summarize/Claim K-5 correlation R3B, R3C					

2 Analyze Craft and Structure (Approaching Texts as a Writer)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A	Analyze how a particular sentence, paragraph, section, or image contributes to meaning.	Analyze how a text's organization or overall structure contributes to meaning.	Analyze how an author's choice concerning a text's organization or overall structure contributes to meaning.	Analyze how an author's choices concerning how to structure a text or sequence information impacts the reader.	Evaluate how an author's choices to structure specific parts of a text contribute to a text's overall meaning and its aesthetic impact.
Structure K-5 correlation R3C					

Reading Informational Text

2 Analyze Craft and Structure (Approaching Texts as a Writer)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
B	Explain how an author's point of view or purpose is conveyed in a text.	Analyze how an author develops his/her point of view or purpose and distinguishes it from those of others.	Analyze how the author acknowledges and responds to conflicting evidence or points of view in a text.	Analyze how an author uses rhetoric to advance point of view or purpose.	Analyze a text in which the author's point of view is not obvious and requires distinguishing what is directly stated from what is implied.
C	Analyze how word choice, including the use of figurative language, connotations and/or repetition, contributes to meaning.	Analyze how word choice contributes to meaning and tone.	Analyze how word choice and sentence structure contribute to meaning and tone.	Analyze the cumulative impact of specific word choices and syntax on meaning and tone.	Evaluate how the author's word choice and use of syntax contribute to a text's overall meaning and tone.

Reading Informational Text

2 Analyze Craft and Structure (Approaching Texts as a Writer)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
D	Identify an author's argument in a text and distinguish claims that are supported by reasons and evidence from claims that are not.	Evaluate an author's argument, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.	Evaluate an author's argument, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.	Evaluate an author's argument, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	Evaluate an author's argument and reasoning for effectiveness, validity, logic, credibility and relevance of the evidence.
Argument/Evidence K-5 correlation R3B					

3 Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A	Compare and contrast the experience of reading a text to listening to or viewing an audio or video version of the same text, noting how a performance impacts personal interpretation.	Compare and contrast information presented in different mediums and analyze how the techniques unique to each medium contribute to meaning.	Compare and contrast information presented in different mediums and analyze how the techniques unique to each medium contribute to meaning.	Analyze how similar ideas or topics are portrayed in different media formats.	Analyze the representation of a subject in two different artistic mediums, including what is emphasized or absent in each treatment.
Texts/Forms K-5 correlation R4A					

Reading Informational Text

3 Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher)					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
B	Compare and contrast one author's presentation of events with that of another.	Compare and contrast how two or more authors writing about the same topic make decisions about craft and structure.	Analyze two or more texts that provide conflicting information on the same topic and identify where the texts disagree on matter of fact or interpretation.	Evaluate how effectively two or more texts develop similar ideas/topics.	Synthesize information from two or more texts about similar ideas/topics to articulate the complexity of the issue.
C	Explain how the text reflects historical and/or cultural contexts.	Explain how the text reflects historical and/or cultural contexts.	Explain how the central ideas of text reflect historical and/or cultural contexts.	Analyze how multiple texts reflect the historical and/or cultural contexts.	Evaluate how an author's work reflects his or her historical/cultural perspective.
D	Read and comprehend literary nonfiction independently and proficiently.	Read and comprehend literary nonfiction independently and proficiently.	Read and comprehend literary nonfiction independently and proficiently.	Read and comprehend literary nonfiction independently and proficiently.	Read and comprehend literary nonfiction independently and proficiently.

Writing and Researching

1 Approaching the Task as a Researcher					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A	Conduct research to answer a question, drawing on several sources; integrate information using a standard citation system.	Conduct research to answer a question; gather relevant sources, print and digital; integrate information using a standard citation system.	Conduct research to answer a question (including a self-generated question); gather relevant, credible sources, print and digital; integrate information using a standard citation system.	Conduct research to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; gather multiple relevant, credible sources, print and digital; integrate information using a standard citation system.	Conduct research to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; gather multiple relevant, credible sources, print and digital; integrate information using a standard citation system.
	Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
Research K-5 correlation W3A					

Writing and Researching

2 Approaching the Task as a Writer					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A	<p>Follow a writing process to produce clear and coherent writing in which the development, organization, style, and voice are appropriate to the task, purpose and audience; develop writing with narrative, expository, and argumentative techniques.</p> <p>A. Narrative: Develop narratives including poems about real or imagined experiences, with clearly identified characters, well-structured event sequences, and relevant, descriptive details.</p> <p>B. Expository: Develop informative/explanatory writing to examine a topic with relevant facts, examples, and details.</p>	<p>Follow a writing process to produce clear and coherent writing in which the development, organization, style, and voice are appropriate to the task, purpose and audience; develop writing with narrative, expository, and argumentative techniques.</p> <p>A. Narrative: Develop narratives including poems about real or imagined experiences, which establish and maintain a consistent point of view, and include clearly identified characters, well-structured event sequences, and relevant, descriptive details.</p> <p>B. Expository: Develop informative/explanatory writing to examine a topic with relevant facts, examples, and details; establish relationships between ideas and supporting evidence.</p>	<p>Follow a writing process to produce clear and coherent writing in which the development, organization, style, and voice are appropriate to the task, purpose and audience; develop writing with narrative, expository, and argumentative techniques.</p> <p>A. Narrative: Develop narratives including poems about real or imagined experiences, which establish and maintain a consistent point of view, and include clearly identified characters, well-structured event sequences, relevant, descriptive details, and a conclusion which reflects on the experiences.</p> <p>B. Expository: Develop informative/explanatory writing to examine a topic with relevant facts, examples, and details; establish relationships between ideas and supporting evidence.</p>	<p>Follow a writing process to produce clear and coherent writing in which the development, organization, style, and voice are appropriate to the task, purpose and audience; self-select and blend (when appropriate) narrative, expository, and argumentative writing techniques.</p>	<p>Follow a writing process to produce clear and coherent writing in which the development, organization, style, and voice are appropriate to the task, purpose and audience; self-select and blend (when appropriate) narrative, expository, and argumentative writing techniques.</p>
Development K-5 correlation W1A, W1B, W1D, W2A, W2B, W2C					

Writing and Researching

2 Approaching the Task as a Writer					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A (cont'd)	C. Argumentative: Develop argumentative writing by introducing and supporting a claim with clear reasons and relevant evidence.	C. Argumentative: Develop argumentative writing by introducing and supporting a claim with clear reasons and relevant evidence; acknowledging counterclaims; establishing relationships between claims and supporting evidence.	C. Argumentative: Develop argumentative writing by introducing and supporting a claim with clear reasons and relevant evidence; acknowledging counterclaims; establishing relationships among claims, counterclaims, and supporting evidence.		
Development K-5 correlation W1A, W1B, W1D, W2A, W2B, W2C					

3 Approaching the Task as a Reader					
A	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
Revise and Edit K-5 correlation W1C	Review, revise, and edit writing with consideration for the task, purpose, and audience. A. Organization and Content: Maintain a clear focus throughout the text; introduce the topic and provide a conclusion that follows from the text. B. Word choice, syntax, and style: Choose specific words and establish and maintain a consistent style; sentences are complete.	Review, revise, and edit writing with consideration for the task, purpose, and audience. A. Organization and Content: Add or delete content and use appropriate transitions to achieve cohesion.	Review, revise, and edit writing with consideration for the task, purpose, and audience. A. Organization and Content: Add or delete content and change organization to achieve the writer's purpose. B. Word choice, syntax, and style: Choose words and make syntactical choices appropriate for the task and audience.	Review, revise, and edit writing with consideration for the task, purpose, and audience. A. Organization and Content: Achieve the writer's purpose and demonstrate an awareness of audience by making choices regarding organization and content. B. Word choice, syntax, and style: Choose words and make syntactical choices to reflect an understanding of how language contributes to meaning.	Review, revise, and edit writing with consideration for the task, purpose, and audience. A. Organization and Content: Achieve the writer's purpose and enhance the reader's understanding of and experience with the text by making choices regarding organization and content.

Writing and Researching

3 Approaching the Task as a Reader					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A (cont'd)	<p>C. Conventions of standard English and usage: Demonstrate a command of the conventions of standard English grammar and usage, including spelling and punctuation.</p> <p>D. Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others.</p>	<p>B. Word choice, syntax, and style: Choose appropriate words for the task and audience; Word choice, syntax, and style: Choose appropriate words for the task and audience; convey the relationship among ideas through varied sentence structures.</p> <p>C. Conventions of standard English and usage: Demonstrate a command of the conventions of standard English grammar and usage, including spelling and punctuation.</p> <p>D. Use technology, including the Internet, to produce, publish, writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.</p>	<p>C. Conventions of standard English and usage: Demonstrate a command of the conventions of standard English grammar and usage, including spelling and punctuation.</p> <p>D. Use technology, including the Internet, to produce, publish, writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.</p>	<p>C. Conventions of standard English and usage: Demonstrate a command of the conventions of standard English grammar and usage including spelling and punctuation.</p> <p>D. Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.</p>	<p>B. Word choice, syntax, and style: Choose words and make syntactical choices to reflect an understanding of how language functions in different contexts and enhance the reader's understanding of the text.</p> <p>C. Conventions of standard English and usage: Demonstrate a command of the conventions of standard English grammar and usage including spelling and punctuation.</p> <p>D. Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.</p>
Revise and Edit K-5 correlation W1C					

Speaking and Listening

1 Collaborating					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A	Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.	Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.	Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.	Work with peers to set rules for collegial discussions and decision-making, clear goals, and deadlines, and individual roles as needed.	Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.
Conversations K-5 correlation SL1A, SL3A					
B	Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.	Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.	Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.	Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.	Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.
Questioning K-5 correlation SL3A					
C	Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	Acknowledge new information expressed by others and, when warranted, modify their own views.	Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of evidence presented.	Respond thoughtfully to diverse perspectives; summarize points of agreement and disagreement; resolve contradictions when possible; and determine what additional information or research is needed.	Respond thoughtfully to diverse perspectives, synthesize claims made on all sides of an issue, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.
Viewpoints of others K-5 correlation SL1A					

Speaking and Listening

2 Presenting					
	Grade 6	Grade 7	Grade 8	Grade 9-10	Grade 11-12
A	Speak clearly, audibly, and to the point, using conventions of language as appropriate to task, purpose and audience when presenting including volume.	Speak clearly, audibly, and to the point, using conventions of language as appropriate to task, purpose and audience when presenting including volume at an understandable pace.	Speak audibly, and to the point, using conventions of language as appropriate to task, purpose and audience when presenting including appropriate volume, clear articulation and accurate pronunciation at an understandable pace.	Speak audibly, and to the point, using conventions of language as appropriate to task, purpose and audience when presenting including appropriate volume, clear articulation and accurate pronunciation at an understandable pace, avoiding verbal filler that might be distracting to listeners.	Speak audibly, and to the point, using conventions of language as appropriate to task, purpose and audience when presenting including fluent and clear articulation, strategically varying volume, pitch, and pace to consistently engage listeners.
Verbal Delivery K-5 correlation SL4A					
B	Position body to face the audience when speaking and make eye contact with listeners at various intervals using gestures to communicate a clear viewpoint.	Position body to face the audience when speaking and makes eye contact with listeners at various intervals using effective gestures to communicate a clear viewpoint.	Make consistent eye contact with a range of listeners when speaking using effective gestures to communicate a clear viewpoint and engage listeners.	Make consistent eye contact with a range of listeners when speaking using effective gestures to communicate a clear viewpoint and engage listeners and avoid body language or mannerisms that might be distracting to the audience.	Make consistent eye contact with a range of listeners when speaking, using a range of gestures or movement to emphasize aspects of speech while avoiding body language or mannerisms that might be distracting to the audience.
Nonverbal K-5 correlation SL4A					
C	Plan and deliver appropriate presentations based on the task, audience and purpose including multimedia components in presentations to clarify information.	Plan and deliver appropriate presentations based on the task, audience and purpose including multimedia components in presentations to clarify claims and findings and emphasize significant points.	Plan and deliver appropriate presentations based on the task, audience and purpose integrating multimedia into presentations to clarify information, strengthen claims and evidence, and add interest.	Plan and deliver appropriate presentations based on the task, audience and purpose making strategic use of multimedia in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	Plan and deliver appropriate presentations based on the task, audience and purpose making strategic use of multimedia in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
Multimedia K-5 correlation SL4A					

K-5 Mathematics Grade-Level Expectations

Missouri Department of Elementary and Secondary Education

Spring 2016

Number Sense

NS	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Know the number names and the count sequence.	Understand and use numbers up to 120.				
1	Count to 100 by ones, fives and tens.	Count to 120, starting at any number less than 120.				
2	Count forward beginning from a given number between 1 and 20.	Read and write numerals and represent a number of objects with a written numeral up to 120.				
3	Count backward from a given number between 10 and 1.	Count backward from a given number between 20 and 1.				
4	Read and write numerals and represent a number of objects from 0 to 20.	Count by 5s to 100 starting at any multiple of five.				

Number Sense

NS	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B	Understand the relationship between numbers and quantities; connect counting to cardinality.					
1	Say the number names when counting objects, in the standard order, pairing each object with one and only one number name and each number name with one and only one object.					
2	Demonstrate that the last number name said tells the number of objects counted and the number of objects is the same regardless of their arrangement or the order in which they were counted.					
3	Demonstrate that each successive number name refers to a quantity that is one larger than the previous number.					

Number Sense

4	Recognize, without counting, the quantity of groups up to 5 objects arranged in common patterns.					
5	Demonstrate that a number can be used to represent "how many" are in a set.					
NS	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C	Compare numbers.					
1	Compare two or more sets of objects and identify which set is equal to, more than or less than the other.					
2	Compare two numerals, between 1 and 10, and determine which is more than or less than the other.					

Number Sense and Operations in Base Ten

N B T	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Work with numbers 11 – 19 to gain foundations for place value.	Understand place value of two-digit numbers.	Understand place value of three digit numbers.	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Use place value understanding and properties of operations to perform multi-digit arithmetic with numbers up to one million.	Use place value system understanding to perform operations with multi-digit whole numbers to billions and decimals to thousandths.
1	Compose and decompose numbers from 11 to 19 into sets of tens with additional ones.	Understand two-digit numbers are composed of ten(s) and one(s).	Understand three-digit numbers are composed of hundreds, tens and ones.	Round whole numbers to the nearest 10 or 100.	Round multi-digit whole numbers to any place.	Read, write and identify numbers from billions to thousandths using number names, base ten numerals and expanded form.
2		Understand that 10 can be thought of as a bundle of 10 ones – called a “ten”.	Understand that 100 can be thought of as 10 tens – called a “hundred”.	Read, write and identify whole numbers within 10,000 using number names, base-ten numerals, and expanded form.	Read, write and identify multi-digit whole numbers up to one million using number names, base-ten numerals, and expanded form.	Compare two numbers from billions to thousandths using the symbols $>$, $=$, $<$, and justify the conclusions.
3		Compare two two-digit numbers using the symbols $>$, $=$, $<$, and justify the conclusion.	Count within 1000 by 1s, 10s and 100s starting with any number.	Demonstrate fluency with sums and differences within 1000.	Compare two multi-digit numbers using the symbols $>$, $=$, $<$, and justify the conclusion.	Understand that in a multi-digit number, a digit represents $1/10$ times what it would represent in the place to its left.
4		Count by 10s to 120 starting at any number.	Read and write numbers to 1000 using number names, base-ten numerals, and expanded	Multiply whole numbers by multiples of 10 in the range 10-90.	Understand that in a multi-digit whole number, a digit represents 10 times what it would	Evaluate the value of powers of 10 and understand the relationship to the place

Number Sense and Operations in Base Ten

			form.		represents in the place to its right.	value system.
5			Compare two three-digit numbers using the symbols $<$, $>$, $=$, and justify the conclusion.		Demonstrate fluency with sums and differences of whole numbers to include the standard algorithm.	Round numbers from billions to thousandths.
6					Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, and explain the calculation.	Add and subtract multi-digit whole numbers and decimals to the thousandths, and justify the solutions.
7					Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, and explain the result.	Multiply multi-digit whole numbers and decimals to the hundredths place, and justify the solutions.
8						Divide multi-digit whole numbers and decimals to the hundredths place using up to two-digit divisors and four-digit dividends, and justify the solutions.

Number Sense and Operations in Base Ten

N B T	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B		Use place value understanding to add and subtract.	Use place value understanding and properties of operations to add and subtract.			
1		Add within 100.	Demonstrate fluency with sums and differences within 100.			
2		Calculate 10 more or 10 less than a given number mentally without having to count.	Add up to four two-digit numbers.			
3		Subtract a multiple of 10 from another two-digit number, and justify the answer.	Add and subtract within 1000, and justify answers.			
4			Use the relationship between addition and subtraction to solve problems.			
5			Add/Subtract mentally 10 or 100 to/from a given number within 1000.			

Number Sense and Operations in Base Ten

N B T	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C			Represent and solve problems involving addition and subtraction.			
1			Write and solve problems involving addition and subtraction within 100.			

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Number Sense and Operations in Fractions

NF	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A				Develop understanding of fractions as numbers.	Extend understanding of fraction equivalence and ordering. (Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12 and 100.)	Understand the relationship between fractions and decimals (denominators that are factors of 100).
1				Understand a unit fraction as the quantity formed by one part when a whole is partitioned into equal parts.	Explain and/or illustrate why two fractions are equivalent.	Understand that parts of a whole can be expressed as fractions and/or decimals.
2				Understand that when a whole is partitioned equally, a fraction can be used to represent a portion of the whole. a. Describe the numerator as representing the number of pieces being considered. b. Describe the denominator as the number of pieces that make the whole.	Recognize and generate equivalent fractions.	Convert decimals to fractions and fractions to decimals.

Number Sense and Operations in Fractions

3				<p>Represent fractions on a number line.</p> <p>a. Understand the whole is the interval from 0 to 1.</p> <p>b. Understand the whole is partitioned into equal parts.</p> <p>c. Understand a fraction represents the endpoint of the length a given number of partitions from 0.</p>	<p>Compare two fractions using the symbols $>$, $=$, $<$, and justify the conclusion.</p>	<p>Compare and order fractions and/or decimals to the thousandths place using the symbols $>$, $=$, $<$, and justify the conclusions.</p>
4				<p>Demonstrate that two fractions are equivalent if they are the same size, or the same point on a number line.</p>		
5				<p>Recognize and generate equivalent fractions using visual models, and justify why the fractions are equivalent.</p>		
6				<p>Compare two fractions with the same numerator or denominator using the symbols $>$, $=$, $<$, and justify the conclusion.</p>		
7				<p>Explain why fraction comparisons are only valid when the two fractions refer to the same whole.</p>		

Number Sense and Operations in Fractions

NF	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B					Extend understanding of operations on whole numbers to fraction operations.	Perform operations and solve problems with fractions and decimals.
1					Understand addition and subtraction of fractions as joining/composing and separating/decomposing parts referring to the same whole.	Estimate results of sums, differences and products with fractions and decimals to the thousandths.

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Number Sense and Operations in Fractions

2					<p>Decompose a fraction into a sum of fractions with the same denominator and recording each decomposition with an equation and justification.</p>	<p>Justify the reasonableness of a product when multiplying with fractions.</p> <ol style="list-style-type: none"> Estimate the size of the product based on the size of the two factors. Explain why multiplying a given number by a fraction greater than 1 results in a product larger than the given number. Explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number. Explain why multiplying the numerator and denominator by the same number is equivalent to multiplying the fraction by 1.
3					<p>Solve problems involving adding and subtracting fractions and mixed numbers with like denominators.</p>	<p>Solve problems involving addition and subtraction of fractions and mixed numbers with unlike denominators, and justify the solutions.</p>

Number Sense and Operations in Fractions

4					<p>Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p>	<p>Extend the concept of multiplication to multiply a fraction or whole number by a fraction.</p> <ol style="list-style-type: none"> a. Recognize the relationship between multiplying fractions and finding the areas of rectangles with fractional side lengths. b. Calculate and interpret the product of a fraction by a whole number and a whole number by a fraction. c. Calculate and interpret the product of two fractions less than one.
5					<p>Solve problems involving multiplication of a fraction by a whole number.</p>	<p>Extend the concept of division to divide unit fractions and whole numbers by using visual fraction models and equations.</p> <ol style="list-style-type: none"> a. Calculate and interpret the quotient of a unit fraction by a non-zero whole number. b. Calculate and interpret the quotient of a whole number by a unit fraction.

Number Sense and Operations in Fractions

NF	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C					Understand decimal notation for fractions, and compare decimal fractions. (Denominators of 10 or 100)	
1					Use decimal notation for fractions with denominators of 10 or 100.	
2					Understand that fractions and decimals are equivalent representations of the same quantity.	
3					Read, write and identify decimals to the hundredths place using number names, base-ten numerals, and expanded form.	
4					Compare two decimals to the hundredths place using the symbols $>$, $=$, $<$, and justify the conclusions.	

Relationships and Algebraic Thinking

R A	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Understand addition as putting together or adding to, and understand subtraction as taking apart or taking from.	Represent and solve problems involving addition and subtraction.	Add and subtract within 20.	Represent and solve problems involving multiplication and division.	Use the four operations with whole numbers to solve problems.	Represent and analyze patterns and relationships.
1	Represent sums and differences within 10.	Use addition and subtraction within 20 to solve problems.	Demonstrate fluency with sums and differences within 20.	Interpret products of whole numbers.	Multiply or divide to solve problems involving a multiplicative comparison.	Investigate the relationship between two numeric patterns. <ol style="list-style-type: none"> a. Generate two numeric patterns given two rules. b. Translate two numeric patterns into two sets of ordered pairs. c. Graph numeric patterns on the coordinate plane. d. Identify the relationship between two numeric patterns.
2	Demonstrate fluency for sums and differences within 5.	Solve problems that call for addition of three whole numbers whose sum is within 20.		Interpret quotients of whole numbers.	Solve multi-step whole number problems involving the four operations and variables and using estimation to assess the reasonableness of the answer.	Write a rule to describe or explain a given numeric pattern.

Relationships and Algebraic Thinking

3	Decompose numbers less than or equal to 10 in more than one way.	Develop the meaning of the equal sign and determine if equations involving addition and subtraction are true or false.		Describe in words or drawings a problem that illustrates a multiplication situation or a division situation.	Solve whole number division problems involving variables in which remainders need to be interpreted, and justify the solution.	
4	Make 10 for any number from 1 to 9.	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.		Use multiplication and division within 100 to solve problems.		
5				Determine the unknown number in a multiplication or division equation relating three whole numbers.		

Relationships and Algebraic Thinking

R A	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B		Understand and apply properties of operations and the relationship between addition and subtraction.	Develop foundations for multiplication and division.	Understand properties of multiplication and the relationship between multiplication and division.	Work with factors and multiples.	Write and interpret numerical expressions.
1		Use properties as strategies to add and subtract.	Determine if a set of objects has an odd or even number of members. a. Count by 2s to 100 starting with any even number. b. Express even numbers as pairings/groups of 2 and write an expression to represent the number using addends of 2. c. Express even numbers as being composed of equal groups and write an expression to represent the number with 2 equal addends.	Apply properties of operations as strategies to multiply and divide.	Recognize that a whole number is a multiple of each of its factors and find the multiples for a given whole number.	Write, evaluate and interpret numeric expressions using the order of operations.
2		Demonstrate that subtraction can be solved as an unknown-addend problem.	Find the total number of objects arranged in a rectangular array with up to 5 rows and 5 columns, and write an equation to represent the total as a sum of equal addends.		Determine if a whole number within 100 is composite or prime, and find all factor pairs for whole numbers within 100.	Translate written expressions into algebraic expressions.

Relationships and Algebraic Thinking

R A	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C		Add and subtract within 20.		Multiply and divide within 100.	Generate and analyze patterns.	Use the four operations to represent and solve problems.
1		Add and subtract within 20.		Multiply and divide whole numbers within 100.	Generate a number pattern that follows a given rule.	Solve and justify multi-step problems involving variables, whole numbers, fractions and decimals.
2		Demonstrate fluency with sums and differences within 10.		Demonstrate fluency with products within 100.	Use words or mathematical symbols to express a rule for a given pattern.	
R A	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
D				Use the four operations to solve word problems.		
1				Write and solve two-step problems involving variables using any of the four operations.		
2				Interpret the reasonableness of answers using mental computation and estimation strategies including rounding.		

Relationships and Algebraic Thinking

R A	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
E				Identify and explain arithmetic patterns.		
1				Identify arithmetic patterns and explain the patterns using properties of operations.		

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Geometry and Measurement

G M	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Reason with shapes and their attributes.	Reason with shapes and their attributes.	Reason with shapes and their attributes.	Reason with shapes and their attributes.	Classify 2-dimensional shapes by properties of their lines and angles.	Classify two- and three-dimensional geometric shapes.
1	Describe several measurable attributes of objects.	Distinguish between defining attributes versus non-defining attributes; build and draw shapes that possess defining attributes.	Recognize and draw shapes having specified attributes, such as a given number of angles or sides. a. Identify triangles, quadrilaterals, pentagons, hexagons, circles, and cubes. b. Identify the faces of three-dimensional objects.	Understand that shapes in different categories may share attributes and that the shared attributes can define a larger category.	Draw and identify points, lines, line segments, rays, angles and perpendicular and parallel lines.	Understand that attributes belonging to a category of figures also belong to all subcategories.
2	Compare the measurable attributes of two objects.	Compose and decompose two- and three-dimensional shapes to build an understanding of part-whole relationships, and the properties of the original and composite shapes.	Partition a rectangle into rows and columns of same-size squares and count to find the total number of squares.	Distinguish rhombuses and rectangles as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to these subcategories.	Classify two-dimensional shapes by their sides and/or angles.	Classify figures in a hierarchy based on properties.

Geometry and Measurement

3		Recognize two- and three-dimensional shapes from different perspectives and orientations.	Partition circles and rectangles into two, three, or four equal shares, and describe the shares and the whole. a. Demonstrate that equal shares of identical wholes need not have the same shape.	Partition shapes into parts with equal areas, and express the area of each part as a unit fraction of the whole.	Construct lines of symmetry for a two-dimensional figure.	Analyze and describe the properties of prisms and pyramids.
4		Partition circles and rectangles into two or four equal shares, and describe the shares and the wholes verbally.				

Geometry and Measurement

G M	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
B	Work with time and money.	Measure lengths in non-standard units.	Measure and estimate lengths in standard units.	Solve problems involving the measurement of time, liquid volumes, and weights of objects.	Understand the concepts of angle and measure angles.	Understand and compute volume.
1	Demonstrate an understanding of concepts of time and devices that measure time.	Order three or more objects by length.	Measure the length of an object by selecting and using appropriate tools.	Tell and write time to the nearest minute.	Identify, estimate and determine angles and their measure.	Understand the concept of volume and recognize that volume is measured in cubic units. a. Describe a cube with edge length 1 unit as a “unit cube” and is said to have “one cubic unit” of volume, and can be used to measure volume. b. Understand that the volume of a right rectangular prism can be found by stacking multiple layers of the base.
2	Name the days of the week.	Compare the lengths of two objects indirectly by using a third object.	Analyze the results of measuring the same object with different units.	Estimate time intervals in minutes.	Draw and measure angles in whole-number degrees using a protractor.	Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for the volume of right rectangular prisms with whole-number edge lengths.
3	Identify pennies, nickels and dimes.	Demonstrate the ability to measure length or distance using objects.	Estimate lengths using units of inches, feet, yards, centimeters and meters.	Solve problems involving addition and subtraction of minutes.		

Geometry and Measurement

4			Measure to determine how much longer one object is than another.	Measure or estimate, with the appropriate tools and units, length, liquid volume and weight of objects.		
5				Use the four operations to solve problems involving lengths, liquid volumes or weights given in the same units.		

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Geometry and Measurement

G M	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
C	Analyze squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres.	Work with time and money.	Relate addition and subtraction to length.	Understand concepts of area.	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	Graph points on the coordinate plane within the first quadrant to solve problems.
1	Identify shapes and describe objects in the environment using names of shapes, recognizing the name stays the same regardless of orientation or size.	Tell and write time in hours and half-hours using analog and digital clocks.	Use addition and subtraction within 100 to solve problems involving lengths that are given in the same units.	Calculate area by using unit squares to cover a plane figure with no gaps or overlaps.	Know relative sizes of measurement units within one system of units. a. Convert measurements in a larger unit in terms of a smaller unit.	Define a first quadrant coordinate system. a. Represent the axes as scaled perpendicular number lines that both intersect at 0, the origin. b. Identify any point on the coordinate plane by its ordered pair coordinates. c. Define the first number in an ordered pair as the horizontal distance from the origin. d. Define the second number in an ordered pair as the vertical distance from the origin.
2	Describe the relative positions of objects in space.	Know the value of a penny, nickel, dime and quarter.	Represent whole numbers as lengths on a number line, and represent whole-number sums and differences within 100 on a number line.	Label area measurements with squared units.	Use the four operations to solve problems involving distances, intervals of time, liquid volume, weight of objects and money.	Plot and interpret points in the first quadrant of a coordinate plane.

Geometry and Measurement

3	Identify and describe the attribute of shapes, and use the attributes to sort a collection of shapes.			Demonstrate that tiling a rectangle to find the area and multiplying the side lengths result in the same value.	Apply the area and perimeter formulas for rectangles to solve problems.	
4	Draw or model simple two-dimensional shapes.			Multiply whole-number side lengths to solve problems involving the area of rectangles.		
5	Compose simple shapes to form larger shapes using manipulatives.			Find rectangular arrangements that can be formed for a given area.		
6				Decompose a rectangle into smaller rectangles to find the area of the original rectangle.		
G M	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
D			Work with time and money.	Understand concepts of perimeter.		Solve problems involving measurement and conversions within a measurement system.
1			Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	Solve problems involving perimeters of polygons.		Convert measurements of capacity, length and weight within a given measurement system.

Geometry and Measurement

2			Describe a time shown on a digital clock as representing hours and minutes, and relate a time shown on a digital clock to the same time on an analog clock.	Understand that rectangles can have equal perimeters but different areas, and rectangles can have equal areas but different perimeters.		Solve multi-step problems that require measurement conversions.
3			Find the value of combinations of dollar bills, quarters, dimes, nickels and pennies, using \$ and ¢ appropriately.			
4			Find combinations of coins that equal a given amount.			

Data and Statistics

DS	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A	Classify objects and count the number of objects in each category.	Represent and interpret data.	Represent and interpret data.	Represent and analyze data.	Represent and analyze data.	Represent and analyze data.
1	Classify objects into given categories; count the number of objects in each category.	Collect, organize and represent data with up to three categories.	Create a line plot to represent a set of numeric data, given a horizontal scale marked in whole numbers.	Create frequency tables and scaled picture graphs and bar graphs to represent a data set with several categories.	Create a frequency table and/or line plot to display measurement data.	Create a line graph to represent a data set, and analyze the data to answer questions and solve problems.
2	Compare category counts using appropriate language.	Draw conclusions from object graphs, picture graphs, T-charts, and tallies.	Generate measurement data to the nearest whole unit, and display the data in a line plot.	Solve one- and two-step problems using information presented in bar and/or picture graphs.	Solve problems involving addition and subtraction by using information presented in a data display.	Create a line plot to represent a given or generated data set, and analyze the data to answer questions and solve problems, recognizing the outliers and generating the median.
3			Draw a picture graph and/or a bar graph to represent a data set with up to four categories.	Create a line plot to represent data.	Analyze the data in a frequency table, line plot, bar graph or picture graph.	
4			Solve problems using information presented in line plots, picture graphs and bar graphs.	Use data shown in a line plot to answer questions.		
5			Draw conclusions from line plots, picture graphs and bar graphs.			

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6-12 Mathematics Grade-Level Expectations

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Missouri Department of Elementary and Secondary Education

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Ratios and Proportional Relationships

RP	Grade 6	Grade 7	Grade 8
A	Understand and use ratios to solve problems.	Analyze proportional relationships and use them to solve problems.	
1	Understand a ratio as a comparison of two quantities and represent these comparisons.	Compute unit rates.	
2	Understand the concept of a unit rate associated with a ratio, and describe the meaning of unit rate.	Recognize and represent proportional relationships between quantities. <ol style="list-style-type: none"> a. Determine when two quantities are in a proportional relationship. b. Identify and/or compute the constant of proportionality (unit rate). c. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation. d. Recognize that the graph of any proportional relationship will pass through the origin. 	
3	Solve problems involving ratios and rates. <ol style="list-style-type: none"> a. Create tables of equivalent ratios, find missing values in the tables, and plot the pairs of values on the coordinate plane. b. Solve unit rate problems. c. Solve percent problems. d. Convert measurement units within and between two systems of measurements. 	Solve problems involving ratios, percentages, and proportional relationships.	

Number Sense and Operations

NS	Grade 6	Grade 7	Grade 8
A	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	Apply and extend previous understandings of operations to add, subtract, multiply, and divide rational numbers.	Know that there are numbers that are not rational, and approximate them by rational numbers.
1	<p>Compute and interpret quotients of positive fractions.</p> <p>a. Solve problems involving division of fractions by fractions.</p>	<p>Apply and extend previous understandings of numbers to add and subtract rational numbers.</p> <p>a. Add and subtract rational numbers.</p> <p>b. Represent addition and subtraction on a horizontal or vertical number line.</p> <p>c. Describe situations and show that a number and its opposite have a sum of 0 (are additive inverses).</p> <p>d. Understand subtraction of rational numbers as adding the additive inverse.</p> <p>e. Determine the distance between two rational numbers on the number line is the absolute value of their difference.</p> <p>f. Interpret sums and differences of rational numbers.</p>	<p>Explore the real number system.</p> <p>a. Know the differences between rational and irrational numbers.</p> <p>b. Understand that all rational numbers have a decimal expansion that terminates or repeats.</p> <p>c. Convert decimals which repeat into fractions and fractions into repeating decimals.</p> <p>d. Generate equivalent representations of rational numbers.</p>
2		<p>Apply and extend previous understandings of numbers to multiply and divide rational numbers.</p> <p>a. Multiply and divide rational numbers.</p> <p>b. Determine that a number and its reciprocal have a product of 1 (multiplicative inverse).</p> <p>c. Understand that every quotient of integers (with non-zero divisor) is a rational number.</p> <p>d. Convert a rational number to a decimal.</p> <p>e. Understand that all rational numbers can be written as fractions or decimal numbers that terminate or repeat.</p> <p>f. Interpret products and quotients of rational numbers by describing real-world contexts.</p>	<p>Estimate the value and compare the size of irrational numbers and approximate their locations on a number line.</p>
3		<p>Solve problems involving the four arithmetic operations with rational numbers.</p>	

Number Sense and Operations

NS	Grade 6	Grade 7	Grade 8
B	Compute with non-negative multi-digit numbers and find common factors and multiples.		
1	Divide multi-digit whole numbers.		
2	Add, subtract, multiply, and divide decimals.		
3	Find common factors and multiples. a. Find the greatest common factor (GCF) and the least common multiple (LCM). b. Use the distributive property to express a sum of two whole numbers with a common factor as a multiple of a sum of two whole numbers.		
NS	Grade 6	Grade 7	Grade 8
C	Apply and extend previous understandings of numbers to the system of rational numbers.		
1	Use positive and negative numbers to represent quantities.		
2	Locate a rational number as a point on the number line. a. Locate rational numbers on a horizontal or vertical number line. b. Write, interpret, and explain problems of ordering for rational numbers. c. Understand that a number and its opposite (additive inverse) are located on opposite sides of zero on the number line.		
3	Understand that the absolute value of a rational number is its distance from 0 on the number line.		

Number Sense and Operations

4	Extend prior knowledge to generate equivalent representations of rational numbers.		

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Expressions, Equations and Inequalities

EEI	Grade 6	Grade 7	Grade 8
A	Apply and extend previous understandings of arithmetic to algebraic expressions.	Use properties of operations to generate equivalent expressions.	Work with radicals and integer exponents.
1	Describe the difference between an expression and an equation.	Create and identify equivalent algebraic expressions.	Know and apply the properties of integer exponents to generate equivalent expressions.
2	Create and evaluate expressions involving variables and whole number exponents. <ol style="list-style-type: none"> a. Identify parts of an expression using mathematical terminology. b. Evaluate expressions at specific values of the variables. c. Evaluate non-negative rational number expressions. d. Write and evaluate algebraic expressions. e. Understand the meaning of the variable in the context of the situation. 	Understand how to use equivalent expressions to clarify quantities in a problem.	Investigate concepts of square and cube roots. <ol style="list-style-type: none"> a. Solve equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. b. Evaluate square roots of perfect squares less than or equal to 625 and cube roots of perfect cubes less than or equal to 1000. c. Recognize that square roots of non-perfect squares are irrational.
3	Identify and generate equivalent algebraic expressions using mathematical properties.		Express very large and very small quantities in scientific notation and approximate how many times larger one is than the other.
4			Use scientific notation to solve problems. <ol style="list-style-type: none"> a. Perform operations with numbers expressed in scientific notation. b. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities.

Expressions, Equations and Inequalities

EEI	Grade 6	Grade 7	Grade 8
B	Reason about and solve one-variable equations and inequalities.	Solve problems using numerical and algebraic expressions and equations.	Understand the connections between proportional relationships, lines, and linear equations.
1	Use substitution to determine whether a given number in a specified set makes a one-variable equation or inequality true.	Solve multi-step problems posed with rational numbers. <ol style="list-style-type: none"> a. Convert between equivalent forms of the same number. b. Assess the reasonableness of answers using mental computation and estimation strategies. 	Graph proportional relationships. <ol style="list-style-type: none"> a. Interpreting the unit rate as the slope of the graph. b. Compare two different proportional relationships.
2	Understand that if any solutions exist, the solution set for an equation or inequality consists of values that make the equation or inequality true.	Write and/or solve linear equations and inequalities in one variable. <ol style="list-style-type: none"> a. Write and/or solve equations of the form $x+p = q$ and $px = q$ in which p and q are rational numbers. b. Write and/or solve two-step equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are rational numbers and interpret the meaning of the solution in the context of the problem. c. Write, solve and/or graph inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are rational numbers. 	Apply concepts of slope and y-intercept to graphs, equations, and proportional relationships. <ol style="list-style-type: none"> a. Explain why the slope (m) is the same between any two distinct points on a non-vertical line in the coordinate plane. b. Derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.
3	Write and solve equations using variables to represent quantities, and understand the meaning of the variable in the context of the situation.		
4	Solve one-step linear equations in one variable involving non-negative rational numbers.		
5	Recognize that inequalities may have infinitely many solutions. <ol style="list-style-type: none"> a. Write an inequality of the form $x > c$, $x < c$, $x \geq c$ or $x \leq c$ to represent a constraint or condition. b. Graph the solution set of an inequality. 		

Expressions, Equations and Inequalities

EEI	Grade 6	Grade 7	Grade 8
C	Represent and analyze quantitative relationships between dependent and independent variables.		Analyze and solve linear equations and inequalities and pairs of simultaneous linear equations.
1	<p>Identify and describe relationships between two variables that change in relationship to one another.</p> <p>a. Write an equation to express one quantity, the dependent variable, in terms of the other quantity, the independent variable.</p> <p>b. Analyze the relationship between the dependent and independent variables using graphs, tables and equations and relate these representations to each other.</p>		<p>Solve linear equations and inequalities in one variable.</p> <p>a. Create and identify linear equations with one solution, infinitely many solutions or no solutions.</p> <p>b. Solve linear equations and inequalities with rational number coefficients.</p>
2			<p>Analyze and solve systems of linear equations.</p> <p>a. Graph systems of linear equations and recognize the approximation of their intersection as the solution to the system.</p> <p>b. Explain why solution(s) to a system of two linear equations in two variables correspond to point(s) of intersection of the graphs.</p> <p>c. Explain why systems of linear equations can have one solution, no solution or infinitely many solutions.</p> <p>d. Solve systems of two linear equations.</p>

Geometry and Measurement

GM	Grade 6	Grade 7	Grade 8
A	Solve problems involving area, surface area, and volume.	Draw and describe geometrical figures and describe the relationships between them.	Understand congruence and similarity using physical models, transparencies, or geometry software.
1	Find the area of polygons by composing or decomposing the shapes into rectangles or triangles.	Solve problems involving scale drawings.	Verify experimentally the congruence properties of rigid transformations. a. Verify that angle measure, betweenness, collinearity and distance are preserved under rigid transformations. b. Investigate if orientation is preserved under rigid transformations.
2	Find the volume of right rectangular prisms. a. Understand that the volume of a right rectangular prism can be found by filling the prism with multiple layers of the base. b. Apply $V = l * w * h$ and $V = Bh$ to find the volume of right rectangular prisms.	Use a variety of tools to construct geometric shapes. a. Determine if provided constraints will create a unique triangle through construction. b. Construct special quadrilaterals given specific parameters.	Understand that two-dimensional figures are congruent if a series of rigid transformations can be performed to map the pre-image to the image. a. Describe a possible sequence of rigid transformations between two congruent figures.
3	Solve problems by graphing points in all four quadrants of the coordinate plane. a. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. b. Find distances between points with the same first coordinate or the same second coordinate. c. Construct polygons in the coordinate plane.	Describe two-dimensional cross sections of pyramids, prisms, cones and cylinders.	Describe the effect of dilations, translations, rotations and reflections on two-dimensional figures using coordinates.

Geometry and Measurement

4	<p>Solve problems using nets.</p> <p>a. Represent three-dimensional figures using nets made up of rectangles and triangles.</p> <p>b. Use nets to find the surface area of three-dimensional figures whose sides are made up of rectangles and triangles.</p>	<p>Understand concepts of circles.</p> <p>a. Analyze the relationship in a circle among the circumference, the radius, the diameter, the area and Pi.</p> <p>b. Know and apply the formulas for circumference and area of circles to solve problems.</p>	<p>Understand that two-dimensional figures are similar if a series of transformations (rotations, reflections, translations and dilations) can be performed to map the pre-image to the image.</p> <p>a. Describe a possible sequence of transformations between two similar figures.</p>
5			<p>Explore angle relationships and establish informal arguments.</p> <p>a. Derive the sum of the interior angles of a triangle.</p> <p>b. Explore the relationship between the interior and exterior angles of a triangle.</p> <p>c. Construct and explore the angles created when parallel lines are cut by a transversal.</p> <p>d. Use the properties of similar figures to solve problems.</p>
GM	Grade 6	Grade 7	Grade 8
B		Apply and extend previous understanding of angle measure, area, and volume.	Understand and apply the Pythagorean Theorem.
1		Use angle properties to write and solve equations for an unknown angle.	Use models to demonstrate a proof of the Pythagorean Theorem and its converse.
2		<p>Understand the relationship between area, surface area and volume.</p> <p>a. Find the area of triangles, quadrilaterals, and other polygons composed of triangles and rectangles.</p> <p>b. Find the volume and surface area of prisms, pyramids and cylinders.</p>	Use the Pythagorean Theorem to solve problems.
3			Use the Pythagorean Theorem to find the distance between points in a coordinate system.

Geometry and Measurement

GM	Grade 6	Grade 7	Grade 8
C			Solve problems involving volume of cones, pyramids, and spheres.
1			Solve problems involving surface area and volume. a. Understand the concept of surface area and find surface area of pyramids. b. Understand the concepts of volume and find the volume of pyramids, cones and spheres.

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Data Analysis, Statistics and Probability

DSP	Grade 6	Grade 7	Grade 8
A	Develop understanding of statistical variability.	Use random sampling to draw inferences about a population.	Investigate patterns of association in bivariate data.
1	Recognize a statistical question.	Understand that statistics can be used to gain information about a population by examining a sample of the population. a. Understand that a sample is a subset of a population. b. Understand that generalizations from a sample are valid only if the sample is representative of the population. c. Understand that random sampling is used to produce representative samples and support valid inferences.	Construct and interpret scatter plots of bivariate measurement data.
2	Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread and overall shape.	Use data from multiple samples to draw inferences about a population and investigate variability in estimates of the characteristic of interest.	Generate a trend line for bivariate data, and informally assess the fit of the line.
3	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary from a single number.		Interpret the parameters of a linear model of bivariate measurement data to solve problems.
4			Understand the patterns of association in bivariate categorical data displayed in a two-way table. a. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. b. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.

Data Analysis, Statistics and Probability

DSP	Grade 6	Grade 7	Grade 8
B	Summarize and describe distributions.	Draw informal comparative inferences about two populations.	
1	Display and interpret data. a. Use dot plots, histograms, and box plots to display and interpret numerical data. b. Create and interpret circle graphs.	Analyze different data distributions using statistical measures.	
2	Summarize numerical data sets in relation to the context. a. Report the number of observations. b. Describe the nature of the attribute under investigation, including how it was measured and its units of measurement. c. Give quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context of the data. d. Analyze the choice of measures of center and variability based on the shape of the data distribution and/or the context of the data.	Compare the numerical measures of center, measures of frequency and measures of variability from two random samples to draw inferences about the population.	
DSP	Grade 6	Grade 7	Grade 8
C		Develop, use, and evaluate probability models.	
1		Investigate the probability of chance events. a. Determine probabilities of simple events. b. Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring.	
2		Investigate the relationship between theoretical and experimental probabilities for simple events. a. Predict outcomes using theoretical probability. b. Perform experiments that model theoretical probability.	

Data Analysis, Statistics and Probability

		c. Compare theoretical and experimental probabilities.	
3		<p>Explain possible discrepancies between a developed probability model and observed frequencies.</p> <p>a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events.</p> <p>b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.</p>	
4		<p>Find probabilities of compound events.</p> <p>a. Represent the sample space of a compound event.</p> <p>b. Design and use a simulation to generate frequencies for compound events.</p>	

Functions

F	Grade 6	Grade 7	Grade 8
A			Define, evaluate, and compare functions.
1			Explore the concept of functions. (The use of function notation is not required.) a. Understand that a function assigns to each input exactly one output. b. Determine if a relation is a function. c. Graph a function.
2			Compare characteristics of two functions.
3			Investigate the differences between linear and nonlinear functions. a. Interpret the equation $y = mx + b$ as defining a linear function, whose parameters are the slope (m) and the y -intercept (b). b. Recognize that the graph of a linear function has a constant rate of change c. Give examples of nonlinear functions.
F	Grade 6	Grade 7	Grade 8
B			Use functions to model relationships between quantities.
1			Use functions to model linear relationships between quantities. a. Explain the parameters of a linear function to the context of a problem. b. Determine the parameters of a linear function. c. Determine the x -intercept of a linear function.
2			Describe the functional relationship between two quantities from a graph or a verbal description.

Number and Quantity

NQ	Algebra 1	Algebra 2
A	Extend and use properties of rational exponents.	Extend and use the relationship between rational exponents and radicals.
1	Explain how the meaning of rational exponents extends from the properties of integer exponents.	Extend the system of powers and roots to include rational exponents.
2	Create equivalent expressions involving radicals and rational exponents using the properties of exponents.	Create and recognize equivalent expressions involving radical and exponential forms of expressions.
3		Add, subtract, multiply and divide radical expressions.
4		Solve equations involving rational exponents and/or radicals and identify situations where extraneous solutions may result.
NQ	Algebra 1	Algebra 2
B	Use units to solve problems.	Use complex numbers.
1	Use units of measure as a way to understand and solve problems involving quantities. a. Identify, label and use appropriate units of measure within a problem. b. Convert units and rates. c. Use units within problems. d. Choose and interpret the scale and the origin in graphs and data displays.	Represent complex numbers.
2	Define and use appropriate quantities for representing a given context or problem.	Add, subtract, multiply and divide complex numbers.
3	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	Know and apply the Fundamental Theorem of Algebra.

Seeing Structure in Expressions

SSE	Algebra 1	Algebra 2
A	Interpret and use structure.	Define and use logarithms.
1	Interpret the contextual meaning of individual terms or factors from a given problem that utilizes formulas or expressions.	Develop the definition of logarithms based on properties of exponents.
2	Analyze the structure of polynomials to create equivalent expressions or equations.	Use the inverse relationship between exponents and logarithms to solve exponential and logarithmic equations.
3	Choose and produce equivalent forms of a quadratic expression or equations to reveal and explain properties. a. Find the zeros of a quadratic function by rewriting it in factored form. b. Find the maximum or minimum value of a quadratic function by completing the square.	Use properties of logarithms to solve equations or find equivalent expressions.
4		Understand why logarithmic scales are used, and use them to solve problems.

Creating Equations

CED	Algebra 1	Algebra 2
A	Create equations that describe linear, quadratic, and exponential relationships.	
1	Create equations and inequalities in one variable and use them to model and/or solve problems.	
2	Create and graph linear, quadratic and exponential equations in two variables.	
3	Represent constraints by equations or inequalities, and by systems of equations or inequalities, and interpret the data points as a solution or non-solution in a modeling context.	
4	Solve literal equations and formulas for a specified variable that highlights a quantity of interest.	

Reasoning with Equations and Inequalities

REI	Algebra 1	Algebra 2
A	Understand solving equations as a process and solve equations and inequalities in one variable.	Solve equations and inequalities.
1	Explain how each step taken when solving an equation or inequality in one variable creates an equivalent equation or inequality that has the same solution(s) as the original.	Solve single variable, linear absolute value equations and inequalities.
2	Solve problems involving quadratic equations. a. Use the method of completing the square to create an equivalent quadratic equation. b. Derive the quadratic formula. c. Analyze different methods of solving quadratic equations.	Solve rational equations.
REI	Algebra 1	Algebra 2
B	Solve systems of equations.	Solve general systems of equations and inequalities.
1	Solve a system of linear equations algebraically and/or graphically.	Solve systems of equations that may include non-linear equations or inequalities.
2	Solve a system consisting of a linear equation and a quadratic equation algebraically and/or graphically.	
3	Justify that the technique of linear combination produces an equivalent system of equations.	
REI	Algebra 1	Algebra 2
C	Represent and solve linear and exponential equations and inequalities graphically.	
1	Explain that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane.	
2	Graph the solution to a linear inequality in two variables.	

Reasoning with Equations and Inequalities

3	Solve problems involving a system of linear inequalities.	

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Arithmetic with Polynomials and Rational Expressions

APR	Algebra 1	Algebra 2
A	Perform operations on polynomials.	Perform operations on polynomials and rational expressions.
1	Add, subtract and multiply polynomials.	Extend the knowledge of factoring to include factors with complex coefficients.
2	Divide polynomials by monomials.	Understand the Remainder Theorem and use it to solve problems.
3		Find the least common multiple of two or more polynomials.
4		Add, subtract, multiply and divide rational expressions.
5		Identify zeros of polynomials when suitable factorizations are available, and use the zeros to sketch the function defined by the polynomial.

Interpreting Functions

IF	Algebra 1	Algebra 2
A	Understand the concept of a function and use function notation.	Use and interpret functions.
1	Understand that a function from one set (domain) to another set (range) assigns to each element of the domain exactly one element of the range. a. Represent a function using function notation. b. Understand that the graph of a function labeled f is the set of all ordered pairs (x, y) that satisfy the equation $y = f(x)$.	Identify, graph and interpret key characteristics of functions to solve problems.
2	Use function notation to evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	Translate between equivalent forms of functions.
IF	Algebra 1	Algebra 2
B	Interpret linear, quadratic, and exponential functions in terms of the context.	
1	Interpret key characteristics of a function that models the relationship between two quantities.	
2	Relate the domain and range of a function to its graph and, where applicable, to the quantitative relationship it describes.	
3	Determine the average rate of change of a function over a specified interval and interpret the meaning.	
4	Interpret the parameters of a linear or exponential function in terms of the context.	
IF	Algebra 1	Algebra 2
C	Analyze linear, quadratic, and exponential functions using different representations.	
1	Graph functions and identify and/or interpret key features of the graph.	

Interpreting Functions

2	Translate between equivalent forms of a function to reveal and explain properties of the function and interpret these in terms of a context.	
3	Compare the properties of two functions.	

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Building Functions

BF	Algebra 1	Algebra 2
A	Build new functions from existing functions (limited to linear, quadratic, and exponential).	Create new functions from existing functions.
1	Analyze the effect of translations and scale changes on functions.	Create new functions by applying the four operations and/or composition of functions and modifying the domain and range as necessary.
2		Derive inverses of functions, and compose the inverse with the original function to show that the functions are inverses.
3		Describe the effects of transformations on functions.

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Modeling

FM	Algebra 1	Algebra 2
A		Use functions to model real-world problems.
1		Create and use functions to solve problems.

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Linear, Quadratic and Exponential Models

LQE	Algebra 1	Algebra 2
A	Construct and compare linear, quadratic, and exponential models and solve problems.	
1	Distinguish between situations that can be modeled with linear or exponential functions. a. Determine that linear functions change by equal differences over equal intervals. b. Recognize exponential situations in which a quantity grows or decays by a constant percent rate per unit interval.	
2	Describe, using graphs and tables, that a quantity increasing exponentially eventually exceeds a quantity increasing linearly or quadratically.	
3	Construct linear, quadratic and exponential equations.	
LQE	Algebra 1	Algebra 2
B	Use arithmetic and geometric sequences.	
1	Write arithmetic and geometric sequences in recursive and explicit forms, and use them to model situations, and translate between the two forms.	
2	Understand that sequences are functions with a domain of the positive integers.	
3	Find the terms of sequences given an explicit or recursive formula.	

Data and Statistical Analysis

DS	Algebra 1	Algebra 2
A	Summarize, represent, and interpret data.	Make inferences and justify conclusions.
1	Analyze and interpret graphical displays of data.	Analyze how random sampling could be used to make inferences about population parameters.
2	Use statistics appropriate to the shape of the data distribution to compare center and spread of two or more different data sets.	Determine whether a specified model is consistent with a given data set.
3	Interpret differences in shape, center and spreads in the context of the data sets, accounting for possible effects of outliers.	Describe and explain the purposes, relationship to randomization and differences among sample surveys, experiments, and observational studies.
4	Summarize data in two-way frequency tables. a. Interpret relative frequencies in the context of the data. b. Recognize possible associations and trends in the data.	Use data from a sample to estimate characteristics of the population and recognize the meaning of the margin of error in these estimates.
5	Construct a scatter plot of bivariate quantitative data describing how the variables are related; determine and use a function that models the relationship. a. Construct a linear function to model bivariate data represented on a scatter plot that minimizes residuals. b. Construct an exponential function to model bivariate data represented on a scatter plot that minimizes residuals.	Describe and explain how the relative sizes of a sample and the population affect the margin of error of predictions.
6	Interpret the parameters of a linear model in the context of the data.	Analyze decisions and strategies using probability concepts.
7	Determine and interpret the correlation coefficient for a linear association.	Evaluate reports based on data.
8	Distinguish between correlation and causation.	
DS	Algebra 1	Algebra 2

Data and Statistical Analysis

B		Fit a data set to a normal distribution.
1		Know and use the characteristics of normally distributed data sets.
2		Determine if data is approximately normally distributed.

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Congruence

CO	Geometry
A	Experiment with transformations in the plane.
1	Define angle, circle, perpendicular line, parallel line, line segment and ray.
2	Represent transformations in the plane, and describe them as functions that take points in the plane as inputs and give other points as outputs.
3	Describe the rotational symmetry and lines of symmetry of two-dimensional figures.
4	Develop definitions of rotations, reflections and translations.
5	Demonstrate the ability to rotate, reflect or translate a figure, and determine a possible sequence of transformations between two congruent figures.
CO	Geometry
B	Understand congruence in terms of rigid motions.
1	Develop the definition of congruence in terms of rigid motions.
2	Develop the criteria for triangle congruence from the definition of congruence in terms of rigid motions.
CO	Geometry
C	Prove geometric theorems.
1	Prove theorems about lines and angles.
2	Prove theorems about triangles.
3	Prove theorems about polygons.

Congruence

Geometry	
CO	
D	Make geometric constructions.
1	Construct geometric figures.

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Similarity, Right Triangles, and Trigonometry

SRT	Geometry
A	Understand similarity in terms of similarity transformations.
1	Construct and analyze scale changes of geometric figures.
2	Use the definition of similarity to decide if figures are similar and to solve problems involving similar figures.
3	Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.
SRT	Geometry
B	Prove theorems involving similarity.
1	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.
SRT	Geometry
C	Define trigonometric ratios and solve problems involving right triangles.
1	Understand that side ratios in right triangles define the trigonometric ratios for acute angles.
2	Explain and use the relationship between the sine and cosine of complementary angles.
3	Use trigonometric ratios and the Pythagorean Theorem to solve right triangles.

Circles

C	Geometry
A	Understand and apply theorems about circles.
1	Prove that all circles are similar using similarity transformations.
2	Identify and describe relationships among inscribed angles, radii and chords of circles.
3	Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.
C	Geometry
B	Find arc lengths and areas of sectors of circles.
1	Derive the formula for the length of an arc of a circle.
2	Derive the formula for the area of a sector of a circle.

Exploring Geometric Properties with Equations

GPE	Geometry
A	Translate between the geometric description and the equation for a conic section.
1	Derive the equation of a circle.
2	Derive the equation of a parabola given a focus and directrix.
GPE	Geometry
B	Use coordinates to prove simple geometric theorems algebraically.
1	Use coordinates to prove geometric theorems algebraically.
2	Prove the slope criteria for parallel and perpendicular lines and use them to solve problems.
3	Find the point on a directed line segment between two given points that partitions the segment in a given ratio.
4	Use coordinates to compute perimeters of polygons and areas of triangles and rectangles.

Geometric Measurement and Dimension

GMD	Geometry
A	Explain volume formulas and use them to solve problems.
1	Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid and cone.
2	Use volume formulas for cylinders, pyramids, cones, spheres and composite figures to solve problems.
GMD	Geometry
B	Visualize relationships between two-dimensional and three-dimensional objects.
1	Identify the shapes of two-dimensional cross-sections of three-dimensional objects.
2	Identify three-dimensional objects generated by transformations of two-dimensional objects.

Modeling with Geometry

MG	Geometry
A	Apply geometric concepts in modeling situations.
1	Use geometric shapes, their measures and their properties to describe objects.
2	Apply concepts of density based on area and volume in modeling situations.
3	Apply geometric methods to solve design mathematical modeling problems.

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Conditional Probability and Rules of Probability

CP	Geometry
A	Understand independence and conditional probability and use them to interpret data.
1	Describe events as subsets of a sample space using characteristics of the outcomes, or as unions, intersections or complements of other events.
2	Understand the definition of independent events and use it to solve problems.
3	Calculate conditional probabilities of events.
4	Construct and interpret two-way frequency tables.
5	Recognize and explain the concepts of conditional probability and independence in a context.
6	Apply and interpret the Addition Rule for calculating probabilities.
7	Apply and Interpret the general Multiplication Rule in a uniform probability model.
8	Use permutations and combinations to solve problems.

K-5 Science Grade-Level Expectations

*Missouri Department of Elementary and Secondary Education
Spring 2016*

Physical Sciences

PS1 - Matter and Its Interactions						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
A	Sort objects based on observable physical properties (e.g., size, material, color, shape, mass) and explain sorting criteria.	Given an equal-arm balance and various objects, illustrate arrangements in which the beam is balanced; Compare and contrast physical properties associated with mass/weight.	"Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.	Predict and investigate that water can change from a liquid to a solid (freeze), and back again (melt), or from a liquid to a gas (evaporation), and back again (condensation) as the result of temperature changes.		Develop a model to describe that matter is made of particles too small to be seen. Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.
B			Describe ways to separate the components of a mixture by their physical properties (e.g., sorting, magnets, screening).	Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.	Describe ways to separate the components of a mixture/solution by their physical properties (i.e., sorting, filtration, magnets, screening).	Conduct an investigation to determine whether the combining of two or more substances results in new substances.

Physical Sciences

PS2 - Motion and Stability: Forces and Interactions						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
A	Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	Describe ways to change the motion of an object (i.e., how to cause an object to go slower, go faster, go farther, change direction, stop).	Predict and demonstrate how the motion of an object could be changed by an applied force or the mass of an object.		<p>Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.</p> <p>Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.</p>	
Forces and Motion						
B				Predict and describe the electric or magnetic interactions between two objects not in contact with each other.	Plan and conduct a fair test to compare and contrast the forces (measured by a spring scale in newtons) required to overcome friction when an	Support an argument that the gravitational force exerted by Earth on objects is directed toward the planet's center.
Types of Interaction						

				Predict the effects of an electrostatic force (static electricity) on the motion of objects (attract or repel).	object moves over different surfaces (i.e., rough/smooth). Predict how changes in either the amount of force applied to an object or the mass of the object affects the motion (speed and direction) of the object.	
PS3 - Energy						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
A	Make observations to determine the effect of sunlight on Earth's surface.	*Identify the source of energy that causes an increase in the temperature of an object (e.g., Sun, stove, flame, light bulb).			Use evidence to construct an explanation relating the speed of an object to the energy of that object.	
Definitions of Energy						

Physical Sciences

Conservation of Energy and Energy Transfer	B	<p>Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.</p> <p>With prompting and support, use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area</p>	<p>*Identify the source of energy that causes an increase in the temperature of an object (e.g., Sun, stove, flame, light bulb).</p>		<p>Make observations to provide evidence that energy can be TRANSFERRED from place to place by sound, light, heat, and electric currents.</p> <p>Provide evidence to construct an explanation of an energy TRANSFORMATION (e.g. temperature change, light, sound, motion, and magnetic effects)</p> <p>Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.</p>	<p>Observe and explain how an object (e.g., moon, mirror, objects in a room) can only be seen when light is reflected from that object to the receiver (eye).</p>

C						
Relationship Between Energy and Forces						Observe and explain that simple machines change the amount of effort force and/or direction of force
D						
Energy in Chemical Process and Everyday Life						Use models to describe that energy stored in food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.

PS4 - Waves and Their Applications in technologies for Information Transfer						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
A	Compare and contrast different sounds (i.e., loudness, pitch, duration).	Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	Plan and conduct investigations to provide evidence that changes in vibration create change in sound.		Develop a model of waves to describe patterns in terms of amplitude or wavelength and that waves can cause objects to move. (Boundary: The terms amplitude and wavelength should not be assessed.)	
Wave Properties						
B		*Identify the source of energy that causes an increase in the temperature of an object (e.g., Sun, stove, flame, light bulb).				Develop a model to describe that objects can be seen only when light is reflected off them or when they produce their own light.
Electromagnetic Radiation						
C		Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.				
Information Technologies and Instrumentation						

Life Sciences

LS1 - From Molecules to Organisms: Structure and Processes						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
A		Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	Identify and compare the physical structures of a variety of animals (e.g., sensory organs, beaks, appendages, body covering) (Do NOT assess terms: sensory organs, appendages).	Construct an argument with evidence that in a particular ecosystem some organisms -- based on structural adaptations or behaviors -- can survive well, some survive less well, and some cannot survive at all.	Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and plant reproduction.	Compare and contrast the major organs/organ systems (e.g. support, reproductive, digestive, transport/circulatory, excretory, response) that perform similar functions for animals belonging to different vertebrate classes. Compare and contrast structures (e.g., wings vs. fins vs. legs; gills vs. lungs; feathers vs. hair vs. scales) that serve similar functions for animals belonging to different vertebrate classes.
Structure and Function						

B				Develop a model to compare and contrast observations on the life cycle of different animals.		
Growth and Development of Organisms						

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C	Use observations to describe patterns of what plants and animals (including humans) need to survive.					Support an argument that plants get the materials (i.e. carbon dioxide, water, sunlight) they need for growth chiefly from air and water.
Organization for Matter and Energy Flow in Organisms						
D					Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.	
Information Processing						

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LS2 - Ecosystems: Interactions, Energy, and Dynamics						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
A						
Interdependent Relationships in Ecosystems			<p>Predict and investigate the growth of plants when growing conditions are altered (e.g., dark vs. light, water vs. no water).</p> <p>Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.</p>			<p>Predict the possible effects on a food chain or food web of adding or removing an organism.</p>
B						
Cycles of matter and Energy Transfer in Ecosystems						<p>Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.</p>

LS3 - Heredity: Inheritance and Variation of Traits						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
A						
Inheritance of Traits		Make observations to construct an evidence based account that young plants and animals are like, but not exactly like, their parents.		Construct scientific arguments to support claims that some characteristics of organisms are inherent from parents and some are influenced by the environment.		

LS4 - Biological Evolution; Unity and Diversity						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
B						
Natural Selection				Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving and finding mates.		

C						
Adaptation				Construct an argument with evidence that in a particular ecosystem some organisms -- based on structural adaptations or behaviors -- can survive well, some survive less well, and some cannot.		
D						
Biodiversity and Humans				Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.		

Earth and Space Sciences

ESS1 - Earth's Place in the Universe						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
A	Describe the presence of the Sun, Moon, and stars in the sky over time.	Use observations of the sun, moon, and stars to describe patterns that can be predicted.				Support an argument that relative distances from Earth affects the apparent brightness of the sun compared to other stars.
The Universe and its Stars						
B		Make observations during different seasons to relate the amount of daylight to the time of year.		Explain how the Sun's position in the sky and the Earth's rotation affect the length and direction of shadows.		Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.
Earth and the Solar System						
C			Use information from several sources to provide evidence that Earth events can occur quickly or slowly.		Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.	
The History of Planet Earth						

ESS2 - Earth's Systems						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
A						
Earth Materials and Systems			Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.		Plan and conduct scientific investigations or simulations to determine how natural processes (e.g. weathering and erosion) shape Earth's surfaces.	Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
B						
Plate Tectonics and Large-Scale Systems			Develop a model to represent the shapes and kinds of land and bodies of water in an area.		Analyze and interpret data from maps to describe patterns of Earth's features.	

The Role of Water in Earth's Surface Processes			Obtain information to identify where water is found on Earth and that it can be solid or liquid.			Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.
Weather and Climate	Use and share observations of local weather conditions to describe patterns over time.	Identify patterns indicating relationships between observed weather data and weather phenomena (e.g., temperature and types of precipitation, clouds and amounts of precipitation).		Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. Obtain and combine information to describe climates in different regions of the world.		

E						
Biogeology	With prompting and support, construct an argument using evidence for how plants and animals (including but not limited to humans) can change the environment to meet their needs.					

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Earth and Space Sciences

ESS3 - Earth and Human Activity						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
Natural Resources	A	Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.			Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.	
Natural Hazards	B	Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.		Make a claim about the merit of an existing design solution (e.g. levies, tornado shelters, sea walls, etc.) that reduces the impacts of a weather-related hazard.		

C							
Human Impacts on Earth's Systems							Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.
D							
Weather and Climate							
E							
Biogeology							

Engineering, Technology and Application of Science

ETS1 - Engineering Design						
Concept	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
Defining and Delimiting Engineering Problems	A	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

B	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.
C	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.
Optimizing the Solution Process						

6-12 Science Grade-Level Expectations

*Missouri Department of Elementary and Secondary Education
Spring 2016*

Physical Sciences

PS1-Matter and Its Interactions		
Concept	Middle School	High School
A	6-8-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures	9-12-PS1-1 Use the organization of the periodic table to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms.
	6-8-PS1-2 Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.	9-12-PS1-2 Construct and revise an explanation for the products of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.
Structure and Properties of Matter	6-8-PS1-3 Gather, analyze, and present information to describe that synthetic materials come from natural resources and how they impact society.	9-12-PS1-3 Plan and conduct an investigation to gather evidence to compare physical and chemical properties of substances such as melting point, boiling point, vapor pressure, surface tension, and chemical reactivity to infer the relative strength of attractive forces between particles.
	6-8-PS1-4 Develop a model that describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.	9-12-PS1-4 Apply the concepts of bonding and crystalline/molecular structure to explain the macroscopic properties of various categories of structural materials, i.e. metals, ionic (ceramics), and polymers.
		9-12-PS1-5 Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy.
B	6-8-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures.	9-12-PS1-2 Construct and revise an explanation for the products of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.
	6-8-PS1-2 Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.	
	6-8-PS1-5 Develop and use a model to describe how the total number of	9-12-PS1-5 Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total

Physical Sciences

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Chemical reactions</p>	<p>atoms remains the same during a chemical reaction and thus mass is conserved.</p> <p>6-8-PS1-6 Construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.</p>	<p>bond energy.</p> <p>9-12-PS1-6 Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.</p> <p>9-12-PS1-7 Refine the design of a chemical system by specifying a change in conditions that would alter the amount of products at equilibrium.</p> <p>9-12-PS1-8 Use symbolic representations and mathematical calculations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.</p>
<p style="text-align: center;">C</p>		
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Nuclear Process</p>		<p>9-12-PS1-9 Use symbolic representations to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay.</p> <p>9-12-ESS1-5 Evaluate evidence of the past and current movements of continental and oceanic crust, the theory of plate tectonics, and relative densities of oceanic and continental rocks to explain why continental rocks are generally much older than rocks of the ocean floor.</p>

Physical Sciences

PS2-Motion and Stability: Forces and Interactions		
Concept	Middle School	High School
A	6-8-PS2-1 Apply physics principles to design a solution that minimizes the force of an object during a collision and develop an evaluation of the solution.	9-12-PS2-1 Analyze data to support and verify the concepts expressed by Newton's 2nd law of motion, as it describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.
Forces and Motion	6-8-PS2-2 Plan and conduct an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.	9-12-PS2-2 Use mathematical representations to support and verify the concepts that the total momentum of a system of objects is conserved when there is no net force on the system. 9-12-PS2-3 Apply scientific principles of motion and momentum to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision.
B	6-8-PS2-2 Plan and conduct an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.	9-12-PS1-1 Use the organization of the periodic table to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms.
Types of Interaction	6-8-PS2-3 Analyze diagrams and collect data to determine the factors that affect the strength of electric and magnetic forces. 6-8-PS2-4 Create and analyze a graph to use as evidence to support the claim that gravitational interactions depend on the mass of interacting objects. 6-8-PS2-5 Conduct an investigation and evaluate the experimental design to provide evidence that electric and magnetic fields exist between objects exerting forces on each other even though the objects are not in contact.	9-12-PS1-3 Plan and conduct an investigation to gather evidence to compare physical and chemical properties of substances such as melting point, boiling point, vapor pressure, surface tension, and chemical reactivity to infer the relative strength of attractive forces between particles. 9-12-PS1-4 Apply the concepts of bonding and crystalline/molecular structure to explain the macroscopic properties of various categories of structural materials, i.e. metals, ionic (ceramics), and polymers 9-12-PS2-4 Use mathematical representations of Newton's Law of Gravitation to describe and predict the gravitational forces between objects. 9-12-PS2-5 Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current.

Physical Sciences

PS3-Energy		
Concept	Middle School	High School
A	<p>6-8-PS1-4 Develop a model that describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.</p> <p>6-8-PS3-1 Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object.</p> <p>6-8-PS3-2 Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.</p> <p>6-8-PS3-3 Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.</p> <p>6-8-PS3-4 Plan and conduct an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the temperature of the sample.</p>	<p>9-12-PS2-5 Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current.</p> <p>9-12-PS3-1 Create a computational model to calculate the change in the energy of one component in a system when the changes in energy are known.</p> <p>9-12-PS3-2 Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motions of particles (objects) and energy associated with the relative position of particles (objects).</p> <p>9-12-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.</p>
B	<p>6-8-PS3-3 Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.</p> <p>6-8-PS3-4 Plan and conduct an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the temperature of the sample.</p> <p>6-8-PS3-5 Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.</p>	<p>9-12-PS3-1 Create a computational model to calculate the change in the energy of one component in a system when the changes in energy are known.</p> <p>9-12-PS3-4 Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics).</p>

Physical Sciences

C	<p>6-8-PS3-2 Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.</p>	<p>9-12-PS3-5 Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction.</p>
<p>Relationship Between Energy and Forces</p>		
D		<p>9-12-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.</p> <p>9-12-PS3-4 Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics).</p> <p>9-12-ESS1-1 Develop a model based on evidence to illustrate the life span of the Sun and the role of nuclear fusion in the Sun’s core to release energy in the form of radiation.</p> <p>9-12-LS2-4 Use a model that illustrates the roles of photosynthesis, cellular respiration, decomposition, and combustion to explain the cycling of carbon in its various forms among the biosphere, atmosphere, hydrosphere, and geosphere.</p>
<p>Energy in Chemical Process and Everyday Life</p>		

Physical Sciences

PS4-Waves and Their Applications in Technologies for Information Transfer		
Concept	Middle School	High School
A	<p>6-8-PS4-1 Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave.</p> <p>6-8-PS4-2 Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.</p>	<p>9-12-PS4-1 Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.</p> <p>9-12-PS4-2 Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other.</p>
B	<p>6-8-PS4-2 Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.</p>	<p>9-12-PS4-2 Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other.</p> <p>9-12-PS4-3 Communicate technical information about how electromagnetic radiation interacts with matter.</p> <p>9-12-PS4-4 Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter.</p> <p>9-12-ESS1-2 Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe.</p>

Life Sciences

LS1-From Molecules to Organisms: Structure and Processes		
Concept	Middle School	High School
A Structure and Function	6-8-LS1-1 Provide evidence that organisms (unicellular and multicellular) are made of cells and that a single cell must carry out all of the basic functions of life.	9-12-LS1-1 Construct a model of how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.
	6-8-LS1-2 Develop and use a model to describe the function of a cell as a whole and ways parts of the cells contribute to that function.	9-12-LS1-2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
	6-8-LS1-3 Develop an argument supported by evidence for how multicellular organisms are organized by varying levels of complexity; cells, tissue, organs, organ systems.	9-12-LS1-3 Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.
	6-8-LS1-4 Present evidence that body systems interact to carry out key body functions, including providing nutrients and oxygen to cells, removing carbon dioxide and waste from cells and the body, controlling body motion/activity and coordination, and protecting the body.	9-12-LS3-1 Develop and use models to clarify relationships about how DNA in the form of chromosomes is passed from parents to offspring through the processes of meiosis and fertilization in sexual reproduction.
B Growth and Development of Organisms	6-8-LS1-5 Construct an explanation for how characteristic animal behaviors as well as specialized plant structures affect the probability of successful reproduction of animals and plants respectively.	9-12-LS1-4 Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms.
	6-8-LS1-6 Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.	

Life Sciences

C	<p>6-8-LS1-7 Construct a scientific explanation based on evidence for the role of photosynthesis and cellular respiration in the cycling of matter and flow of energy into and out of organisms.</p>	<p>9-12-LS1-5 Use a model to demonstrate how photosynthesis transforms light energy into stored chemical energy.</p> <p>9-12-LS1-7 Use a model to demonstrate that cellular respiration is a chemical process whereby the bonds of molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy.</p> <p>9-12-LS1-8 Construct and revise an explanation based on evidence that organic macromolecules are primarily composed of six elements, where carbon, hydrogen, and oxygen atoms may combine with nitrogen, sulfur, and phosphorus to form large carbon-based molecules.</p>
<p>Organization for Matter and Energy Flow in Organisms6-8</p>		
D		
<p>Information Processing</p>		

Life Sciences

LS2-Ecosystems: Interactions, Energy, and Dynamics		
Concept	Middle School	High School
A Interdependent Relationships in Ecosystems	6-8-LS2-1 Analyze and interpret data to provide evidence for the effects of resource availability on individual organisms and populations of organisms in an ecosystem.	9-12-LS2-1 Explain how various biotic and abiotic factors affect the carrying capacity and biodiversity of an ecosystem using mathematical and/or computational representations.
	6-8-LS2-2 Construct an explanation that predicts the patterns of interactions among and between the biotic and abiotic factors in a given ecosystem.	
B Cycles of matter and Energy Transfer in Ecosystems	6-8-LS2-3 Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.	9-12-LS2-2 Construct and revise an explanation based on evidence that the processes of photosynthesis, chemosynthesis, and aerobic and anaerobic respiration are responsible for the cycling of matter and flow of energy through ecosystems and that environmental conditions restrict which reactions can occur.
		9-12-LS2-3 Communicate the pattern of the cycling of matter and the flow of energy among trophic levels in an ecosystem 9-12-LS2-4 Use a model that illustrates the roles of photosynthesis, cellular respiration, decomposition, and combustion to explain the cycling of carbon in its various forms among the biosphere, atmosphere, hydrosphere, and geosphere

Life Sciences

<p style="text-align: center;">C</p> <p style="text-align: center;">Ecosystems 6-8 Dynamics, Functioning and Resilience</p>	<p>M-LS2-4 Construct an argument supported by empirical evidence that explains how changes to physical or biological components of an ecosystem affect populations.</p> <p>M-LS2-5. Evaluate benefits and limitations of differing design solutions for maintaining an ecosystem.</p>	<p>9-12-LS2-5 Evaluate the claims, evidence, and reasoning that the interactions in ecosystems maintain relatively consistent populations of species while conditions remain stable, but changing conditions may result in new ecosystem dynamics.</p> <p>9-12-LS2-6 Design, evaluate, and/or refine solutions that positively impact the environment and biodiversity.</p>
<p style="text-align: center;">D</p> <p style="text-align: center;">Social Interactions and Group Behavior</p>	<p>M-LS2-5. Evaluate benefits and limitations of differing design solutions for maintaining an ecosystem.</p>	<p>9-12-LS2-6 Design, evaluate, and/or refine solutions that positively impact the environment and biodiversity.</p>

LS3-Heredity: Inheritance and Variation of Traits		
Concept	Middle School	High School
A		9-12-LS3-1 Develop and use models to clarify relationships about how DNA in the form of chromosomes is passed from parents to offspring through the processes of meiosis and fertilization in sexual reproduction.
Inheritance of Traits		
B		9-12-LS3-2 Compare and contrast asexual and sexual reproduction with regard to genetic information and variation in offspring
Variation of Traits		9-12-LS3-3 Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.
		9-12-LS3-4 Make and defend a claim that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) mutations occurring during replication, and/or (3) mutations caused by environmental factors.
		9-12-LS3-5 Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.

Life Sciences

LS4-Biological Evolution; Unity and Diversity		
Concept	Middle School	High School
A Evidence of Common Ancestry and Diversity	6-8-LS4-1 Analyze and interpret evidence from the fossil record to infer patterns of environmental change resulting in extinction and changes to life forms throughout the history of the Earth.	9-12-LS4-1 Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.
		9-12-LS4-2 Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy.
B Natural Selection	6-8-LS4-2 Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.	9-12-LS4-1 Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.
	6-8-LS4-3 Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.	9-12-LS4- 2 Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment. 9-12-LS4-3. Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait.

Life Sciences

<p style="text-align: center;">C</p> <p style="text-align: center;">Adaptation</p>	<p>6-8-LS4-4 Interpret graphical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.</p>	<p>9-12-LS4-4 Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment.</p> <p>9-12-LS4-5 Construct an explanation based on evidence for how natural selection leads to adaptation of populations.</p> <p>9-12-LS4-6 Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.</p> <p>9-12-LS4-7 Create or revise a model to test a solution to mitigate adverse impacts of human activity on biodiversity.</p>
<p style="text-align: center;">D</p> <p style="text-align: center;">Biodiversity and Humans</p>		<p>9-12-LS4-8 Create or revise a model to test a solution to mitigate adverse impacts of human activity on biodiversity</p>

Earth and Space Sciences

ESS1-Earth's Place in the Universe		
Concept	Middle School	High School
A	<p>6-8-ESS1-1 Develop and use a model of the Earth-sun-moon system to explain the cyclic patterns of lunar phases and eclipses of the sun and moon.</p> <p>6-8-ESS1-2 Develop and use a model of the Earth-sun system to explain the cyclical pattern of seasons, which includes the Earth's tilt and directional angle of sunlight on different areas of Earth across the year.</p> <p>6-8-ESS1-3 Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.</p>	<p>9-12-ESS1-1 Develop a model based on evidence to illustrate the life span of the Sun and the role of nuclear fusion in the Sun's core to release energy in the form of radiation.</p> <p>9-12-ESS1-2 Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe.</p> <p>9-12-ESS1-3 Communicate scientific ideas about the way stars, over their life cycle, produce elements.</p>
The Universe and its Stars		
B	<p>6-8-ESS1-1 Develop and use a model of the Earth-sun-moon system to explain the cyclic patterns of lunar phases and eclipses of the sun and moon.</p> <p>6-8-ESS1-2 Develop and use a model of the Earth-sun system to explain the cyclical pattern of seasons, which includes the Earth's tilt and directional angle of sunlight on different areas of Earth across the year gravity in the motions within galaxies and the solar system.</p> <p>6-8-ESS1-3 Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.</p> <p>6-8-ESS1-4 Analyze and interpret data to determine scale properties of objects in the solar system.</p>	<p>9-12-ESS1.4 Use Kepler's Law to predict the motion of orbiting objects in the solar system.</p> <p>9-12-ESS2-4 Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.</p>
Earth and the Solar System		

Earth and Space Sciences

C	<p>6-8-ESS1 -5 Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's history.</p> <p>6-8-EE2-1 Develop and use a model to illustrate that energy from the Earth's interior drives convection which cycles Earth's crust leading to melting, crystallization, weathering and deformation of large rock formations, including generation of ocean sea floor at ridges, submergence of ocean sea floor at trenches, mountain building and active volcanic chains.</p> <p>6-8-ESS2-2 Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.</p> <p>6-8-ESS2-3 Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.</p>	<p>9-12-ESS1-5 Evaluate evidence of the past and current movements of continental and oceanic crust, the theory of plate tectonics, and relative densities of oceanic and continental rocks to explain why continental rocks are generally much older than rocks of the ocean floor.</p> <p>9-12-ESS1-6 Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history.</p>

The History of Planet Earth

Earth and Space Sciences

ESS2-Earth's Systems		
Concept	Middle School	High School
A	<p>6-8-EE2-1 Develop and use a model to illustrate that energy from the Earth's interior drives convection which cycles Earth's crust leading to melting, crystallization, weathering and deformation of large rock formations, including generation of ocean sea floor at ridges, submergence of ocean sea floor at trenches, mountain building and active volcanic chains.</p> <p>6-8-ESS2-2 Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.</p>	<p>9-12-ESS2-1 Develop a model to illustrate how Earth's interior and surface processes (constructive and destructive) operate at different spatial and temporal scales to form continental and ocean-floor features.</p> <p>9-12-ESS2-2 Analyze geoscientific data to make the claim that one change to Earth's surface can create changes to other Earth systems.</p> <p>9-12-ESS2-3 Develop a model based on evidence of Earth's interior to describe the cycling of matter by thermal convection.</p> <p>9-12-ESS2-4 Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.</p>
Earth Materials and Systems		
B	<p>6-8-ESS2-3 Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.</p>	<p>9-12-ESS1-5 Evaluate evidence of the past and current movements of continental and oceanic crust, the theory of plate tectonics, and relative densities of oceanic and continental rocks to explain why continental rocks are generally much older than rocks of the ocean floor.</p>
Plate Tectonics and Large-Scale Systems		

Earth and Space Sciences

<p style="text-align: center;">C</p> <p style="text-align: center;">The Role of Water in Earth's Surface Processes</p>	<p>6-8-ESS2-2 Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.</p> <p>6-8-ESS2-4 Design and develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.</p> <p>6-8-ESS2-5 Research, collect, and analyze data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.</p> <p>6-8-ESS2-6 Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.</p>	<p>9-12-ESS2-5 Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.</p>
<p style="text-align: center;">D</p> <p style="text-align: center;">Weather and Climate</p>	<p>6-8-ESS2-5 Research, collect, and analyze data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.</p> <p>6-8-ESS2-6 Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.</p>	<p>9-12-ESS2-4 Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.</p> <p>9-12-ESS2-5 Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.</p> <p>9-12-ESS2-6 Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.</p> <p>9-12-ESS2-7 Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth.</p> <p>9-12-ESS3-6 Predict how human activity affects the relationships between Earth systems in both positive and negative ways.</p>

Earth and Space Sciences

E		9-12-ESS2-7 Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth.
Biogeology		

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Earth and Space Sciences

ESS3-Earth and Human Activity		
Concept	Middle School	High School
A	6-8-ESS3-1 Construct a scientific explanation based on evidence for how the uneven distributions of Earth’s mineral, energy, and groundwater resources are the result of past and current geoscience processes and human activity.	9-12-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity. 9-12-ESS3-2 Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on economic, social, and environmental cost-benefit ratios.
Natural Resources		
B	6-8-ESS3-2 Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.	9-12-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.
Natural Hazards		
C	6-8-ESS3-3 Analyze data to define the relationship for how increases in human population and per-capita consumption of natural resources impact Earth's systems. 6-8-ESS3-4 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.	9-12-ESS3-3 Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. 9-12-ESS3-4 Evaluate or refine a technological solution that reduces impacts of human activities on natural systems in order to restore stability and or biodiversity of the ecosystem as well as prevent their reoccurrences.
Human Impacts on Earth's Systems		

Earth and Space Sciences

D	6-8-ESS3-5 Analyze evidence of the factors that have caused the change in global temperatures over the past century.	9-12-ESS3-5 Analyze geoscientific data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.
Global Climate Change		9-12-ESS3-6 Predict how human activity affects the relationships between Earth systems in both positive and negative ways.

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Engineering, Technology, and Application of Science

ETS1-Engineering Design		
Concept	Middle School	High School
A	<p>6-8-ETS-1 Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.</p>	<p>9-12-ETS-1 Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.</p> <p>9-12-ETS-2 Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.</p>
Defining and Delimiting Engineering Problems		
B	<p>6-8-ETS-2 Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.</p> <p>6-8-ETS-3 Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.</p> <p>6-8-ETS-4 Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.</p>	<p>9-12-ETS3-3 Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.</p> <p>9-12-ETS -4 Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.</p>
Developing Possible Solutions		
C	<p>6-8-ETS-3 Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.</p> <p>6-8-ETS-4 Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.</p>	<p>9-12-ETS-2 Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.</p>
Optimizing the Solution Process		

K-5 Social Studies Grade Level Expectations

*Missouri Department of Elementary and Secondary Education
Spring 2016*

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Social Studies K-5

1. Knowledge of the principles expressed in documents shaping constitutional democracy in the United States						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
A.						
Purposes and principles of the Declaration of Independence					With assistance, read and analyze the text of the Declaration of Independence to determine important principles that it contains.	Apply the principles of the Declaration of Independence to the historical time periods being studied and to current events.
B.	Identify reasons for making rules within the school.	Identify and explain why cities make laws.	Explain and give examples of how laws and rules are made and changed within a community.	Explain the major purposes of the Missouri Constitution. Explain and give examples of how laws are made and changed within the state.	Explain the major purposes of the U.S. Constitution. Identify important principles in the U.S. Constitution.	With assistance, research and analyze the text of the U.S. Constitution to determine important principles that it contains. Apply the principles of the U.S. Constitution to the historical time periods being studied and to current events.
Purposes and principles of the Constitution						
C.		Discuss how individual rights are protected.	Examine how individual rights are protected within a community.	Examine how individual rights are protected within our state.	Explain the major purpose of the Bill of Rights. Identify important principles in the Bill of Rights.	Apply the principles of the Bill of Rights to historical time periods being studied and to current events.
Purposes and principles of the Bill of Rights						

Social Studies K-5

1. Knowledge of the principles expressed in documents shaping constitutional democracy in the United States						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
D. Role of citizens and governments in carrying out constitutional principles		Give examples of being an active and informed citizen in your classroom or community.	Explain how being an active and informed citizen makes a difference in your community. List the consequences of citizens not actively participating in their communities.	Explain how the State of Missouri relies on responsible citizen participation and draw implications for how people should participate.	Examine ways by which citizens have effectively voiced opinions, monitored government, and brought about change both past and present.	Analyze ways by which citizens have effectively voiced opinions, monitored government, and brought about change both past and present.
E. Character traits and civic attitudes of significant individuals	Describe the character traits of role models within your family or school.	Describe the character traits of role models within your community.	Describe the character traits and civic attitudes of inventors or pioneers in their field who influenced progress in the nation.	Describe the character traits and civic attitudes of influential Missourians.	Describe the character traits and civic attitudes of historically significant individuals in American history prior to 1800.	Describe the character traits and civic attitudes of historically significant individuals in United States history from 1800 - 2000.
F. Knowledge of the symbols of our state and nation	Identify the flag as a symbol of our nation. Recite the Pledge of Allegiance.	Recognize and explain the significance of symbols of your local community.	Describe the importance of the Pledge of Allegiance. Recognize and explain the significance of national symbols.	Explain how the National Anthem symbolizes our nation. Recognize and explain the significance of Missouri symbols.	Recognize and explain the significance of national symbols associated with historical events and time periods being studied.	Recognize and explain the significance of national symbols associated with historical events and time periods being studied.

Social Studies K-5

2. Knowledge of principles and processes of governance systems						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
A.						
Purposes and roles of government				Explain how governments balance individual rights with common good to solve local community or state issues.	Explain how the purpose and roles of government have been debated across historical time periods to current times.	Explain how the purpose and roles of government have been debated across historical time periods to current times.
B.						
Dispute resolution				Analyze peaceful resolution of disputes by the courts, or other legitimate authorities in Missouri.	Analyze peaceful resolution of disputes by courts or other legitimate authorities in US history from early settlement to 1800.	Analyze peaceful resolution of disputes by courts or other legitimate authorities in U.S. history from 1800 – 2000.
C.						
Processes of governmental systems in decision making	Describe why groups need to make decisions and how those decisions are made in families and classrooms.	Describe how authoritative decisions are made, enforced and interpreted within schools and local communities.	Identify the responsibilities and powers of government officials at various levels and branches of government in authoritative decision making.	Analyze how authoritative decisions are made, enforced and interpreted by the state government across historical time periods and current events.	Analyze how authoritative decisions are made, enforced and interpreted by the federal government across historical time periods and current events.	Analyze how authoritative decisions are made, enforced and interpreted by the federal government across historical time periods and current events.

Social Studies K-5

2. Knowledge of principles and processes of governance systems						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
D.	Describe roles and responsibilities of people in authority in families and in groups.	Describe roles and responsibilities of people in government in a community.	Identify and explain the concept of branches and functions of government.	Identify and explain the functions of the three branches of government in Missouri.	Identify and explain the functions of the three branches of government in the federal government.	Distinguish between powers and functions of local, state and national government in the past and present.
Functions of governmental systems						

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Social Studies K-5

3a. Knowledge of continuity and change in the history of Missouri and the United States						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
<p>A.</p> <p>Understand the movement of people from many regions of the world to North America</p>			<p>Compare the culture and people in our community across multiple time periods.</p>	<p>Describe the migration of native Americans to Missouri prior to European settlement in Missouri.</p> <p>Describe the discovery, exploration and early settlement of Missouri by European immigrants.</p> <p>Describe the reasons African peoples were enslaved and brought to the Missouri prior to 1800.</p>	<p>Describe the migrations of native Americans prior to 1800.</p> <p>Describe the discovery, exploration and early settlement of America by Europeans prior to 1800.</p> <p>Describe the reasons African peoples were enslaved and brought to the Americas prior to 1800.</p>	<p>Outline the territorial expansion of the United States.</p> <p>Describe the impact of migration on immigrants and the United States c. 1800-2000.</p>
<p>B.</p> <p>Historical perspective / Thinking / Passage of time</p>	<p>Create a personal history.</p> <p>Compare your family's life in the past and present.</p>	<p>Compare and contrast our community in the past and the present.</p>	<p>Describe the habitats, resources, art and daily lives of native American people in regions of the U.S. and Missouri, past and present.</p>	<p>Examine cultural interactions and conflicts among Native Americans, European immigrants and enslaved Africans in Missouri.</p>	<p>Examine cultural interactions and conflicts among Native Americans, Immigrants from Europe and enslaved Africans prior to 1800.</p>	<p>Examine cultural interactions and conflicts among Native Americans, European Americans and African Americans from 1800 – 2000.</p>

3a. Knowledge of continuity and change in the history of Missouri and the United States

Social Studies K-5

CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
C.	Describe the contributions of people typically studied in K-5 programs associated with national holidays.	Describe the contributions of people typically studied in K-5 programs associated with national holidays.	Describe the contributions of inventors or pioneers in their field who influenced progress in our nation	Identify and describe the historical significance of the individuals from Missouri who have made contributions to our state and nation.	Identify and describe the contributions of historically significant individuals to America and the United States prior to 1800.	Identify and describe the contributions of historically significant individuals to the United States from 1800 – 2000
Knowledge of the contributions of significant persons in U.S. history.						
D.					<p>Explain the causes of the American Revolution, including the perspectives of patriots, loyalists, Native Americans, African Americans and European allies.</p> <p>Explain the factors which contributed to the colonists' success.</p>	
Perspectives on the American Revolution						

Social Studies K-5

3a. Knowledge of continuity and change in the history of Missouri and the United States						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
E. Political developments and reform movements in the U.S.					Describe the historical context for the drafting of the Declaration of Independence, the Constitution and the Bill of Rights. Explain how the Declaration of Independence, the Constitution and the Bill of Rights affected people in the United States prior to 1800.	Discuss the causes and consequences of the Dred Scott decision on Missouri and the nation. Explain the causes and consequences of major political developments and reform in U.S. history from 1800-2000.
F. Westward Expansion and settlement in the US				Describe the importance of the Louisiana Purchase and the expedition of Lewis and Clark. Discuss issues of Missouri statehood. Explain why Missouri was important in the westward expansion of the United States.	Investigate the causes and consequences of westward expansion prior to 1800.	Investigate the causes and consequences of westward expansion 1800-2000.

Social Studies K-5

3a. Knowledge of continuity and change in the history of Missouri and the United States						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
G.				<p>Explain Missouri’s role in the Civil War.</p> <p>Evaluate the impact of westward expansion on the Native Americans in Missouri.</p> <p>Describe the consequences of the Civil War in Missouri.</p>		<p>Identify political, economic and social causes and consequences of the Civil War and Reconstruction.</p>
Understanding the causes and consequences of the Civil War						
H.						<p>Identify political, economic, and social causes and consequences of the Great Depression.</p>
Major economic developments in the United States						
I.						<p>Identify political, economic, and social causes and consequences of World War I and WWII on the United States.</p> <p>Identify the political, economic and social consequences of the Cold War on the United States.</p>
Causes, comparisons, and results of major twentieth-century wars						

Social Studies K-5

4. Knowledge of economic concepts and principles						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
A.	Describe examples of scarcity within your family and school.	Describe examples of scarcity within your school and community.	Describe consumption and production and the relationship to goods and services within your region.	Compare and contrast private and public goods and services.	Compare and contrast saving and financial investment.	Explain how scarcity, supply and demand, opportunity costs, income, labor, wages and other economic concepts affect our nation's past, present and future.
Describe examples of needs and wants within your family and school.	Describe consumers and producers and the relationship to goods and services within your school and community.	Demonstrate how people barter to exchange goods and services.	Define economy.	Distinguish among natural, capital and human resources.		
					Explain the relationship of income, labor, and wages.	Explain supply and demand.
B.			Describe a personal cost-benefit situation.	Conduct a personal cost-benefit analysis.		
					Understanding the consequences of economic decisions	

Social Studies K-5

4. Knowledge of economic concepts and principles						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
C.				Define taxes and explain how taxes are generated and used.	Explain how the government utilizes taxes to provide goods and services.	
Understanding various types of taxes and their purposes						
D.				Explain the factors, past and present, that influence changes in our state's economy.	Explain the factors, past and present, that influence changes in state and regional economies.	Explain the factors, past and present, that influence changes in our nation's economy. Use an economic lens to describe the impact of migration on the immigrants and the United States c. 1800-2000.
Factors that influence the economy						

Social Studies K-5

5. Knowledge of major elements of geographical study and analysis and their relationship to changes in society and the environment						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
A. Reading and constructing maps	Identify maps as representations of real places.	Identify globes as representations of real places.	Read and construct maps with title and key.	Read and construct historical and current maps.	Construct and interpret historical and current maps	Use geographic sources to acquire information, answer questions and solve problems.
	With assistance, read, construct, and use maps of familiar places. Match legend symbols to map features.	With assistance, read, construct, and use maps which have a title and key. Describe how maps are created for different purposes. Use a compass rose to identify cardinal directions on a map.	Identify the properties and use of different types of maps for a variety of purposes.			Construct maps for relevant social studies topics.
B. Understanding the concept of location to make predictions and solve problems.	Describe locations using positional words within the classroom.	Locate a place by pointing it out on a map and by describing its relative location.	Name and locate the regions in your community. Name and locate regions of the world.	Name and locate major cities, rivers, regions, and states which border Missouri. Describe and use absolute location using a grid system.	Name and locate specific regions, states, capitals, river systems and mountain ranges in the United States based on historical or current topics.	Name and locate specific regions, states, capitals, river systems and mountain ranges in the United States based on historical or current topics. Locate and describe real places, using absolute and relative location.

Social Studies K-5

5. Knowledge of major elements of geographical study and analysis and their relationship to changes in society and the environment						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
C.		Identify physical characteristics of your community.	Identify and describe physical characteristics of the world.	Identify and compare physical geographic characteristics of Missouri.	Identify and compare physical characteristics of specific regions within the nation.	Describe and analyze physical characteristics of the nation.
		Describe human characteristics of your community.	Identify and describe physical characteristics of the student's region in Missouri. Describe human characteristics of the student's region in Missouri.	Describe human geographic characteristics of Missouri.	Identify and compare diverse human geographic characteristics of the nation.	Describe and analyze diverse human characteristics of the nation.
D.	Relationships within places Human-Environment Interactions			Describe how people of Missouri are affected by, depend on, adapt to and change their physical environments.	Analyze how people are affected by, depend on, adapt to and change their physical environments.	Evaluate how people are affected by, depend on, adapt to and change their physical environments.

Social Studies K-5

5. Knowledge of major elements of geographical study and analysis and their relationship to changes in society and the environment						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
E.			Describe different types of communication and transportation and identify their advantages and disadvantages.	Describe how changes in communication and transportation technologies affect people's lives.	Analyze how changes in communication and transportation technologies affect people's lives.	Evaluate how changes in communication and transportation technologies affect people's lives.
Understanding relationships between and among places			Describe how transportation and communication systems have facilitated the			
F.			Define the concept of regions.	Compare regions in Missouri.	Identify different regions in the United States and analyze how their characteristics affect humans.	Describe different regions in the United States and analyze how their characteristics affect humans.
Understanding relationships between and among regions			Identify examples of different regions in Missouri.			
			Describe why people of different groups settle more in one place or region than another.			

5. Knowledge of major elements of geographical study and analysis and their relationship to changes in society and the environment						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
G.			Explain how geography affects the way people live today.	Explain how geography affected important events in Missouri history.	Use geography to interpret the past and predict future consequences as appropriate to topics or eras discussed.	Use geography to interpret the past, explain the present and plan for the future as appropriate to topics or eras discussed.
Using geography to interpret, explain and predict						Use a geographic lens to describe the impact of migration on the immigrants and the United States c. 1800-2000.

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Social Studies K-5

6. Knowledge of relationships of the individual and groups to institutions and cultural traditions						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
A. Cultural characteristics of all people	Describe cultural characteristics of your family and class members.	Describe cultural characteristics of your school and community.	Compare the cultural characteristics of regions in the state.	Compare the cultural characteristics of regions in Missouri.	Compare cultural characteristics across historical time periods.	Compare cultural characteristics across historical time periods. Describe the cultural impact of migration on the immigrants and the United States c. 1800-2000.
B. Methods of resolving conflicts	Explain how to resolve disputes peacefully in the classroom and on the playground.	Propose peaceful resolutions of disputes in the classroom and on the playground.	Demonstrate a peaceful resolution to a dispute.	Take part in a constructive process or method for resolving conflicts.	Apply constructive processes or methods for resolving conflicts.	Evaluate constructive processes or methods for resolving conflicts.
C. Ideas and beliefs of different cultures	Share stories related to your family cultural traditions and family lore.	Recount stories about locations, people, and cultural events in your community.	Recall stories and songs that reflect the cultural history of peoples from various regions in the United States.	Research stories and songs that reflect the cultural history of Missouri.	Research stories and songs that reflect the cultural history of the early United States prior to 1800.	Research stories and songs that reflect the cultural history of the United States c. 1800-2000.

Social Studies K-5

6. Knowledge of relationships of the individual and groups to institutions and cultural traditions						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
D.	Describe how you and your family remember and commemorate your cultural heritage.	Describe how your community commemorates its cultural heritage.	Describe how regions commemorate cultural heritage.	Describe how people in Missouri preserve their cultural heritage.	Analyze the preservation of cultural life, celebrations, traditions, and commemorations over time.	Analyze the preservation of cultural life, celebrations, traditions, and commemorations over time.
Cultural heritage and preservation						
E.				Examine the changing roles of Native Americans, Immigrants, African Americans and women in Missouri history.	Examine roles among Native Americans, Immigrants, African Americans and women from early migrations to the colonial times.	Examine the changing roles among Native Americans, Immigrants, African Americans and women from 1800-2000.
Changing of roles of various groups						

Social Studies K-5

7. Knowledge of the use of tools of social science inquiry						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
A. Identify, select, analyze, and evaluate resources to create a product of social science inquiry	Label and discuss different social studies sources with guidance and support from an adult. Use artifacts to share information on social studies topics.	Identify and describe primary and secondary social studies sources in classroom discussion with guidance and support from an adult. Identify and use artifacts to share information on social studies topics.	Describe and analyze primary and secondary social studies sources in classroom discussion with guidance and support. Select and use artifacts to share information on social studies topics.	Select and analyze primary and secondary social studies sources to determine importance with guidance and support. Create and use artifacts to share information on social studies topics.	Select, analyze, and evaluate primary and secondary social studies sources with guidance and support. Analyze and use artifacts to share information on social studies topics.	Identify, select, analyze, and evaluate resources to create a product of social science inquiry. Evaluate and use artifacts to share information on social studies topics.
B. Use visual tools to communicate information and ideas	Use visual tools to communicate information.	Create visual tools to communicate information.	Use visual tools and informational texts to communicate information.	With guidance and support, use visual tools and informational texts to interpret, draw conclusions, make predictions, and communicate information and ideas.	Use visual tools and informational texts to interpret, draw conclusions, make predictions, and communicate information and ideas with guidance and support, as needed. Create products such as maps, graphs, timelines, charts and models, diagrams etc. to communicate information and understanding.	Use visual tools to interpret, draw conclusions, make predictions, and communicate information and ideas. Create products such as maps, graphs, timelines, charts and models, diagrams etc. to communicate information and understanding on social studies topics.

Social Studies K-5

7. Knowledge of the use of tools of social science inquiry						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
C. Understanding and supporting fact, opinion, bias and point of view in sources.			<p>Explain the difference between fact and opinion in social studies topics.</p> <p>Explain the concept of point of view in social studies topics.</p>	<p>Identify facts and opinions in social studies topics.</p> <p>Identify point of view in social studies topics.</p>	<p>Distinguish between fact and opinion and recognize bias and point of view in social studies topics.</p>	<p>Explain how facts and opinions affect point of view and/or bias in social studies topics.</p> <p>Identify, research, and defend a point of view/position on a social studies topic.</p>
D. Conducting and presenting research with appropriate resources.	Share findings about a social studies topic.	Share findings about a social studies topic.	Share research about a social studies topic.	Present social studies research to an audience using appropriate sources.	With assistance, conduct and present social studies research to an audience using appropriate sources.	Conduct and present social studies research to an audience using appropriate sources.

Social Studies K-5

7. Knowledge of the use of tools of social science inquiry						
CONCEPTS	GRADE K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5
E. Developing a research plan and identifying resources	Ask questions and find answers about a social studies topic with assistance.	Ask questions and find answers about a social studies topic with assistance.	Ask questions and find answers about a social studies topic. Describe steps in a social studies research plan. Identify appropriate resources for investigating social studies topics with assistance.	Generate questions about a social studies topic and find answers using sources. List and effectively use the steps in a research plan about a social studies topic. Identify appropriate resources for investigating social studies topics.	Generate questions about a social studies topic and find answers using a variety of sources. Apply the steps of a research plan about a social studies topic. Identify appropriate resources for investigating social studies topics.	Generate questions about a social studies topic and find answers using a variety of sources. Evaluate and use appropriate resources for investigating social studies topics.
F. Conducting and presenting research with appropriate resources				Research an appropriate social studies topic and share research, with assistance if needed.	Research an appropriate social studies topic and share research.	Conduct and present social studies research to an audience, using appropriate sources.
G. Supporting a point of view						Research and defend a point of view/position on a social studies topic.

6-12 Social Studies Grade Level Expectations

*Missouri Department of Elementary and Secondary Education
Spring 2016*

Disciplinary Tools

1. History: Continuity and Change						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 1	A. Create and use tools to analyze a chronological sequence of related events in American history.	A. Create and use tools to analyze a chronological sequence of related events in American history.	A. Create and use tools to analyze a chronological sequence of related events in world history.	A. Create and use tools to analyze a chronological sequence of related events in world history.	A. Create and use historical maps and timelines in order to represent continuity and change within and among regions over time.	A. Create and use tools to analyze a chronological sequence of events related to a study of government.
Tools of Social Science Inquiry						
Theme 1	B. Explain connections between historical context and peoples' perspectives at the time in American history.	B. Explain connections between historical context and peoples' perspectives at the time in American history.	B. Explain connections between historical context and peoples' perspectives at the time in world history.	B. Explain connections between historical context and peoples' perspectives at the time in world history.	B. Evaluate historical solutions to problems within and among world regions in order to draw conclusions about current and future decisions.	B. Explain connections between historical context and peoples' perspectives about government at the time.
Tools of Social Science Inquiry						
Theme 1	C. With assistance, develop a research plan, identify appropriate resources for investigating social studies topics and create a research product focused on an element of American history.	C. Develop a research plan, identify appropriate resources for investigating social studies topics and create a research product focused on an element of American history.	C. With assistance, develop a research plan, identify appropriate resources for investigating social studies topics and create a research product focused on an element of world history.	C. Develop a research plan, identify appropriate resources for investigating social studies topics and create a research product focused on an element of world history.	C. With assistance, develop a research plan, identify appropriate resources for investigating social studies topics and create a research product focused on an element of world geography.	C. Develop a research plan, identify appropriate resources for investigating social studies topics and create a research product focused on an element of government.
Tools of Social Science Inquiry						

Disciplinary Tools

1. History: Continuity and Change (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 1				D. Predict the consequences which can occur when individuals fail to carry out their personal responsibilities.	D. Analyze current issues using relevant geographic resources to propose solutions.	
Tools of Social Science Inquiry						
Theme 1				E. Predict the consequences which can occur when institutions fail to meet the needs of individuals and groups.		
Tools of Social Science Inquiry						

Disciplinary Tools

2. Government Systems and Principals						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 1	A. Analyze laws, policies and processes to determine how governmental systems affect individuals and groups in society in American history prior to c.1870.	A. Analyze laws, policies, and processes to determine how governmental systems affect individuals and groups in society in American history c.1870-2010.	A. Analyze laws, policies, and processes to determine how governmental systems affect individuals and groups in society in world history prior to c.1450.	A. Analyze laws, policies and processes to determine how governmental systems affect individuals and groups in society in world history c.1450-2010.	A. Using a geographic lens, analyze laws, policies and processes to determine how governmental systems affect individuals and groups in society.	A. Analyze laws, policies, and processes to determine how governmental systems affect individuals and groups in society.
Tools of Social Science Inquiry						
Theme 1		B. Predict the consequences which can occur when individuals fail to carry out their personal responsibilities.		B. Predict the consequences which can occur when individuals fail to carry out their personal responsibilities.	B. Analyze current issues using relevant geographic sources to propose solutions.	B. Predict the consequences which can occur when individuals fail to carry out their personal responsibilities.
Tools of Social Science Inquiry						
Theme 1		C. Predict the consequences which can occur when institutions fail to meet the needs of individuals and groups.		C. Predict the consequences which can occur when institutions fail to meet the needs of individuals and groups.		C. Predict the consequences which can occur when institutions fail to meet the needs of individuals and groups.
Tools of Social Science Inquiry						

Disciplinary Tools

3. Geographic Study						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 1	A. Create and use maps and other graphic representations in order to explain relationships and reveal patterns or trends in American history prior to c.1870.	A. Create and use maps and other graphic representations in order to explain relationships and reveal patterns or trends in American history c.1870-2010.	A. Create and use maps and other graphic representations in order to explain relationships and reveal patterns or trends in world history prior to c.1450.	A. Create and use maps and other graphic representations in order to explain relationships and reveal patterns or trends in world history c.1450-2010.	A. Create and use maps, graphs, statistics, and geo-spatial technology in order to explain relationships and reveal spatial patterns or trends.	A. Create and use maps and other graphic representations in order to explain relationships and reveal patterns or trends about government.
Tools of Social Science Inquiry						
Theme 1	B. List and explain the criteria that give regions their identities in different periods of United States history prior to 1870.	B. List and explain the criteria that give regions their identities in different periods of United States history post 1870.	B. List and explain the criteria that give world regions their identities in different periods of world history.	B. List and explain the criteria that give world regions their identities in different periods of world history.	B. Locate the states of the United States and corresponding regions.	B. Locate the thirteen original colonies and their key cities.
Tools of Social Science Inquiry						
Theme 1	C. Locate major cities of Missouri, the United States, and the world; states of the United States and key world nations; the world's continents, and oceans; and major topographical features of the United States.	C. Locate major cities of Missouri, the United States, and the world; states of the United States and key world nations; the world's continents, and oceans; and major topographical features of the United States.	C. Locate major cities of the world and key world nations; the world's continents, and oceans; and major topographical features of the world.	C. Locate major cities of the world and key world nations; the world's continents, and oceans; and major topographical features of the world.	C. Locate cities of Missouri, the United States and the world.	C. Identify the key regions and resources of the original thirteen colonies.
Tools of Social Science Inquiry						

Disciplinary Tools

3. Geographic Study (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 1	D. Describe physical characteristics and human characteristics that make specific places unique in American history.	D. Describe physical characteristics and human characteristics that make specific places unique in American history.	D. Describe physical characteristics and human characteristics that make specific places unique in world history.	D. Describe physical characteristics and human characteristics that make specific places unique in world history.	D. Locate the major nations of the world.	
Tools of Social Science Inquiry						
Theme 1					E. Locate the major landforms of the world.	
Tools of Social Science Inquiry						

Disciplinary Tools

4. Economic Concepts						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 1	A. Using an American history lens, examine the opportunity costs and benefits of economic decisions on society as a whole as well as on individuals.	A. Using an American history lens, analyze the opportunity costs and benefits of economic decisions on society as a whole as well as on individuals.	A. Using a world history lens, examine the opportunity costs and benefits of economic decisions on society as a whole as well as on individuals.	A. Using a world history lens, analyze the opportunity costs and benefits of economic decisions on society as a whole as well as on individuals.	A. Using a geographic lens, evaluate economic decisions to determine costs and benefits on society.	A. Examine the opportunity costs and benefits of economic decisions on society as a whole as well as on individuals.
Tools of Social Science Inquiry						

Disciplinary Tools

5. People, Groups and Cultures						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 1	A. Using an American history lens, describe how peoples' perspectives shaped the sources/artifacts they created.	A. Using an American history lens, describe how peoples' perspectives shaped the sources/artifacts they created.	A. Using a world history lens, describe how peoples' perspectives shaped the sources/artifacts they created.	A. Using a world history lens, describe how peoples' perspectives shaped the sources/artifacts they created.	A. Analyze material culture to explain a people's perspective and use of place.	A. Using a government lens, describe how peoples' perspectives shaped the sources/artifacts they created.
Tools of Social Science Inquiry						
Theme 1	B. Using an American history lens, examine the origins and impact of social structures and stratification on societies and relationships between peoples.	B. Using an American history lens, examine the origins and impact of social structures and stratification on societies and relationships between peoples.	B. Using a world history lens, examine the origins and impact of social structures and stratification on societies and relationships between peoples.	B. Using a world history lens, examine the origins and impact of social structures and stratification on societies and relationships between peoples.	B. Determine how regions are defined and created in order to explain the relationships between places.	B. Examine the origins and impact of social structures and stratification on societies, relationships between peoples and governments.
Tools of Social Science Inquiry						
Theme 1					C. Compare and contrast the human characteristics within and among regions over time.	
Tools of Social Science Inquiry						

Key Concepts and Understanding

1. History: Continuity and Change						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 2	Settlements	Re-Emerging America	Early Civilizations: Geography's Impact on History	Accelerated Exchange	World Geography and Cultures	Historical Foundations
Key Concepts and Understandings	A. Trace the causes and consequences of indigenous peoples arriving in the Americas beginning c. 15,000 BCE.	A. Compare and contrast the plans for and results of political reintegration of Southern states after the Civil War.	A. Explain the causes and results of the Agricultural Revolution in relation to the development of new and more complex societies such as Mesopotamia, Egypt, Indus, and China.	A. Explain the causes and effects of the expansion of societies in Western Africa, Byzantine Empire, Gupta India, Chinese Dynasties, and Muslim Empires.	A. Explain how regions of the world change over time in relation to historical events and trends and the human characteristics of place.	A. Trace the evolution of government in the English colonies to explain American colonists' expectations for self-rule.
Theme 2	B. Compare motivating factors leading European nations to settle in the New World to explain colonial diversity and regional differences.	B. Describe the purpose, challenges, and economic incentives that impacted expansion and Westward movement, including the concept of Manifest Destiny.		B. Compare the dominant characteristics, contributions of, and interactions among major civilizations of Asia, Europe, Africa, the Americas and Middle East in ancient and medieval times.	B. Explain how forces of nature impact historic and current conflicts and cooperation.	B. Analyze the Declaration of Independence to determine the influence of classical and Enlightenment thought on revolutionary ideals.
Key Concepts and Understandings						
Theme 2	C. Trace the causes and consequences of conflict and cooperation between Native Americans and colonists using multiple viewpoints.	C. Trace the contributions of individuals and institutions on social, political, artistic and economic development.		C. Explain how the Crusades, Scientific Revolution, Black Death, and the resulting exchanges that followed, impacted Europe and led to the Renaissance.		C. Evaluate the extent to which decisions made in the Constitutional Convention were influenced by previous models of government and experiences under British rule.
Key Concepts and Understandings						

Key Concepts and Understanding

1. History: Continuity and Change (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 2	D. Describe the causes and consequences of the Seven Years War as a turning point in American history.					D. Compare and contrast governmental systems, current and historical, including those that are democratic, totalitarian, monarchic, oligarchic and theocratic, and describe their impact.
Key Concepts and Understandings						

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Key Concepts and Understanding

1. History: Continuity and Change						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	Founding	Emerging Globally	Classical Civilizations: Foundations of Representative Government	The Age of Discovery and Exchange		Structure of Government
Key concepts and Understandings	A. Trace the events leading to escalating conflict between England and the colonies from multiple viewpoints.	A. Analyze how political developments and Constitutional Amendments of the period altered the relationship between government and people.	A. Analyze the rise and fall of classical civilizations to determine their significance to future societies.	A. Analyze the Protestant Reformation and Scientific Revolution to explain new institutions and ways of thinking, and predict their impact on conflict and cooperation.		A. Explain how the central debates of the Constitutional Convention were resolved.
Theme 3	B. Analyze the Declaration of Independence to determine the historical context and political philosophies that influenced its creation.	B. Describe the intended and unintended consequences of progressive reforms and government responses to World War I.	B. Trace the impact of conflicts, competition, and cooperation within and among classical civilizations.	B. Analyze the causes and consequences of European overseas expansion to determine its effect on Europe, Asia, Africa, and the Americas.		B. Explain how concerns over a strong central government were addressed to provide for ratification of the Constitution.
Key concepts and Understandings						

Key Concepts and Understanding

1. History: Continuity and Change (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	C. Evaluate the strengths and weaknesses of the American colonies and England to explain the American victory in the Revolution.			C. Explain the challenges and benefits of large land empires including those found in Russia, China, and the Middle East.		C. Trace the significant changes in roles, powers and size of the three branches of government.
Key concepts and Understandings						
Theme 3	D. Explain the major debates that occurred during the adoption of the Constitution and their ultimate resolution.					D. Analyze the changing relationship between state and federal governmental powers.
Key concepts and Understandings						
Theme 3	E. Evaluate the responses of early American leaders to the social, political, economic and religious challenges facing the new nation.					
Key concepts and Understandings						

Key Concepts and Understanding

1. History: Continuity and Change (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	F. Infer how events of this period led to the development of philosophies, interest groups and political parties.					
Key concepts and Understandings						
Theme 3						
Key concepts and Understandings						
Theme 3						
Key concepts and Understandings						

Key Concepts and Understanding

1. History: Continuity and Change						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 4	Expansion	Great Depression and World War I	Middle Ages-Regional Interconnectedness and Conflict	Age of Revolution		Government in Action.
Key concepts and Understandings	A. Analyze the expansion of the United States in the early nineteenth century to trace U.S. growth and predict future conflicts.	A. Trace the significant event and developments of the Great Depression and WWII.	A. Explain how the collapse of government and resulting instability led to the development of feudal kingdoms in Europe and Japan.	A. Evaluate the forms of republics over time to determine their implication for pre-revolutionary ideas and expectations during the Age of Revolution.		A. Trace the changing power relationships between branches of the United States government over time.
Theme 4	B. Evaluate the responses of American leaders to the social, political, economic and religious challenges of the period.	B. Evaluate the responses of American leaders to the challenges of the Great Depression and World War II.	B. Explain the significance of the expansion of the Muslim and Mongol rule in Europe, Asia and Africa.	B. Compare and contrast causes and significant outcomes of political revolutions during this era.		B. Analyze changing ideals regarding an “active judiciary,” an “active legislature” and an “active executive branch” in United States government over time.
Key concepts and Understandings						
Theme 4	C. Analyze the forced removal and resettlements of Native American tribes to determine its impact on their cultures and civilizations.	C. Describe critical developments and turning points in WWII including major battles.	C. Analyze how the Crusades and Black Death affected existing societies in Europe, Asia and Africa.	C. Analyze political revolutions and reform movements in order to determine their enduring effects worldwide on the political expectations for self-government and individual liberty.		
Key concepts and Understandings						

Key Concepts and Understanding

1. History: Continuity and Change (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 4		D. Evaluate the political, social, economic, technological and environmental impact of US participation in World War II and America's new role in the post-war world.	D. Analyze the cultures of civilizations in sub-Saharan Africa, Mesoamerica, and Andean South America.	D. Analyze responses and reactions to revolutions in order to predict future conflicts.		
Key concepts and Understandings						
Theme 4		E. Evaluate the impact of US participation in WWII and America's new role in the post-war world.				
Key concept and Understandings						

Key Concepts and Understanding

1. History: Continuity and Change						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 5	Conflict and Crisis	The American Stage		Modern Era	Conflict and Crisis	
Key concepts and Understandings	A. Analyze political compromises over slavery in the territories to explain intensifying sectional conflicts.	A. Describe the causes, major conflicts, consequences, and enduring legacy of the Cold War.		A. Analyze world-wide imperialism in the late nineteenth and early twentieth centuries to determine its causes and consequences.	A. Analyze political compromises over slavery in the territories to explain intensifying sectional conflicts.	
Theme 5	B. Trace the events as well as political, cultural, economic and social conditions leading to conflict between Northern and Southern states.	B. Evaluate the responses of American leaders to the challenges of global tensions.		B. Trace the origins, and relationships among the world wars, revolutions, and global conflicts of twentieth century to determine their impacts on the world today.		
Key concepts and Understandings						
Theme 5	C. Describe critical developments and turning points in the Civil War, including major battles.	C. Trace changes in military strategies as a response to the challenges of the Cold War.		C. Analyze the process of colonization and decolonization to compare its effects on the world today.		
Key concepts and Understandings						

Key Concepts and Understanding

1. History: Continuity and Change (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 5		D. Analyze the origins, goals, and key events of the movements to realize equal rights for women and minorities.				
Key concepts and Understandings						

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Key Concepts and Understanding

1. History: Continuity and Change						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 6		Contemporary America				
Key concepts and Understandings		A. Analyze the fall of the Soviet Union to determine its effect on US foreign policy and its relationships with the rest of the world.				
Theme 6		B. Trace the origins of twenty-first century conflicts to understand US policies and actions.				
Key concepts and Understandings						
Theme 6		C. Evaluate the responses of American leaders to the challenges of global tensions.				
Key concepts and Understandings						

Key Concepts and Understanding

1. History: Continuity and Change (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 6		D. Evaluate how the ability to access and distribute information affects individuals, groups, industry, and governments.				
Key concepts and Understandings						

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Key Concepts and Understanding

2. Governmental Systems and Principles						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 2	Settlements	Reemerging America	Early Civilizations: Geography's Impact on History	Accelerated Exchange	World Geography and Cultures	Historical Foundations
Key concepts and Understandings	A. Compare the governmental systems of European powers to determine effect on colonization in the Americas.	A. Analyze the period of Reconstruction to determine its effect on separation of powers checks and balances power of the central government.	A. Explain the origins, functions, and structure of monarchies, theocracies, city states, and dynasties	A. Compare and contrast governmental systems, including monarchy, oligarchy, dynasty, and theocracy.	A. Using a geographic lens, analyze the laws and governmental systems of a place in order to determine their effects on individuals, groups, and institutions.	A. Apply the concepts of natural law, social contract, due process of law, and popular sovereignty to explain the purpose and legacy of the Declaration of Independence.
Theme 2	B. Explain how the founding of English colonies influenced their governments and expectations for self-rule.	B. Evaluate the effectiveness of major legislation, Constitutional amendments, and court decisions relating to freed slaves.	B. Distinguish the powers and responsibilities of subjects and political leaders in monarchies, theocracies, and city-states.	B. Explain the influence of the classical revival on governmental systems including their source of power, how leaders are selected, and how decisions are made.	B. Draw conclusions about how laws impact the development of a place and how a place impacts the development of laws.	B. Describe the strengths and weaknesses of the Articles of Confederation to explain its failure as a national government.
Key concepts and Understandings						
Theme 2	C. Analyze local and colonial governments to trace the factors influencing their structure and function.	C. Analyze the expansion of political parties, interest groups and political machines to determine their effect on American government and policy.	C. Explain how the codification of law impacted early civilizations.			
Key concepts and Understandings						

Key Concepts and Understanding

2. Governmental Systems and Principles						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	Founding	Emerging Globally	Classical Civilizations: Foundations of Representative Governments	Age of Discovery and Change		Structure of Government
Key concepts and Understandings	A. Evaluate the significance of England's end to salutary neglect.	A. Analyze how political developments and Constitutional Amendments of the period altered the relationship between government and people.	A. Explain the origins, functions, and structure of governmental systems within classical civilizations.	A. Describe how governments and governmental institutions of the Eastern and Western Hemispheres changed to deal with the challenges and opportunities of an interconnected world.		A. Apply the concepts of due process of law, popular sovereignty, rule of law, representation, and federalism to explain the purpose and legacy of the Constitution.
Theme 3	B. Apply the concept of representation to the conflict between the colonies and England.	B. Describe the intended and unintended consequences of progressive reforms and government responses to World War I.	B. Analyze direct democracy and representative democracy in order to apply the concepts of majority rule, minority rights and civic duty.	B. Analyze the style and function of a leader to determine their impact on a governmental system.		B. Analyze the Articles of Confederation and the Constitution to determine their success in implementing the ideals of the Declaration of Independence.
Key concepts and Understandings						
Theme 3	C. Apply the principles of inalienable rights, popular sovereignty, natural rights, and social contract to evaluate the purpose and legacy of the Declaration of Independence.		C. Explain how the rule of law developed from a written code of laws as well as concepts of separation of powers and checks and balances.			C. Analyze the unique roles and responsibilities of the three branches of government to determine how they function and interact.
Key concepts and Understandings						

Key Concepts and Understanding

2. Governmental Systems and Principles (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	D. Evaluate the successes and challenges of the <i>Articles of Confederation</i> to explain the need for a constitutional convention.					D. Describe and give examples of how the constitutional principle of checks and balances limits the power of government and leaders.
Key concepts and Understandings						
Theme 3	E. Apply the principles of rule of law, representation, separation of powers, checks and balances, and federalism to explain the purposes and functions of the Constitution.					E. Explain how the Bill of Rights and subsequent amendments limit the power of government, protect individual liberty, and provide for equality under the law.
Key concepts and Understandings						
Theme 3	F. Describe the origin and purpose of the Bill of Rights and evaluate the enduring significance of these concepts to the preservation of individual rights and liberties.					F. Compare the structure and functions of local, state and federal governments.
Key concepts and Understandings						

Key Concepts and Understanding

2. Governmental Systems and Principles (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	G. Examine elections, issues, laws, and events to explain how the concepts of judicial review, elastic clause, and an amendment process were established or used to meet challenges.					
Key concepts and Understandings						

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Key Concepts and Understanding

2. Governmental Systems and Principles						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 4	Expansion	Great Depression and World War II	Regional Interconnectedness and Conflict	Age of Revolutions		Government in Action
Key concepts and Understandings	A. Trace the expansion of voting rights and patterns and explain how it impacted elections and political movements.	A. Analyze the relationships among the branches of government to explain conflicts and the changing power of each.	A. Explain the origins, functions, and structure of governmental systems within civilizations.	A. Analyze the key ideas of Enlightenment thinkers to explain the development of ideas such as natural law, natural rights, social contract, due process, and separation of powers.		A. Evaluate the role and influence of contemporary political parties on government.
Theme 4	B. Analyze landmark Supreme Court cases to determine the effect on the definition and expansion of federal power.	B. Evaluate how the programs and policies of the New Deal and WWII changed the relationships among the government, groups, and individuals.	B. Explain how the rule of law is further developed by the Magna Carta, including limited government and due process.	B. Compare and contrast limited and absolute governments and the extent of their impact on individuals and society.		B. Explain a citizen's legal obligations, as well as opportunities for, engaging with and using local, state, and federal governments to shape decision-making.
Key concepts and Understandings						
Theme 4	C. Explain how the principles of rule of law, separation of powers, checks and balance, and federalism were impacted by Jacksonian Democracy.	C. Determine the lasting impact of the New Deal and WWII on principles of government including separation of powers, checks and balances, judicial review, and limited government.	C. Analyze the conflict and cooperation between religions and the state to determine their impact on societies.	C. Compare and contrast government systems resulting from political revolutions.		C. Compare the various processes pertaining to the selection of political leaders at the federal, state, and local level.
Key concepts and Understandings						

Key Concepts and Understanding

2. Governmental Systems and Principles						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 5	Conflict and Crisis	The American Stage		The Modern Era		
Key concepts and Understandings	A. Compare responses of government systems in the North and South to major legislation, executive orders, and court decisions before, during and immediately after the Civil War.	A. Analyze treaties, agreements, and international organizations to determine their impact on world challenges along with national and international order.		A. Compare and contrast evolving governmental systems, including monarchy, totalitarianism, theocracy, and representative government to determine their impact on society.		
Theme 5	B. Analyze federalism and popular sovereignty to explain peoples' expectations of the role of government and their place in governance.	B. Determine the lasting impact of the this period on principles of government including separation of powers, checks and balances, rule of law, judicial review, and limited government.		B. Analyze treaties, agreements, and international organizations to determine their impact on world challenges along with national and international order.		
Key concepts and Understandings						
Theme 5	C. Analyze the election of 1860 to explain the development of political parties and how they influence the selection of leaders.	C. Evaluate the extent to which Supreme Court cases and legislation served to expand equal rights.				
Key concepts and Understandings						

Key Concepts and Understanding

2. Governmental Systems and Principles (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 5	D. Compare and contrast the governmental systems of the North and South to determine the strengths and weaknesses of federal and confederal systems.					
Key concepts and Understandings						

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Key Concepts and Understanding

2. Governmental Systems and Principles						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 6		Contemporary America				
Key concepts and Understandings		A. Evaluate the effectiveness of organizations, groups, agreements, and treaties to promote cooperation and maintain international order.				
Theme 6		B. Determine the lasting impact of this period on principles of government including separation of powers, executive orders, checks and balances, rule of law, judicial review, and limited government.				
Key concepts and Understandings						
Theme 6		C. Evaluate the changing roles and influence of political parties and interest groups on governmental decision-making.				
Key concepts and Understandings						

Key Concepts and Understanding

3. Geographical Study						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 2	Settlements	Re-emerging America	Early Civilizations: Geography's Impact on History	Accelerated Change	World Geography and Cultures	Historical Foundations
Key concepts and Understandings	A. Analyze diverse Native American cultures in North, Central and South America to explain the ways they adapted to their various environments.	A. Evaluate the causes, patterns, and outcomes of internal migrations and urbanization.	A. Describe how the physical characteristics of river valleys supported the permanent settlements and the rise of early civilizations.	A. Analyze physical geography to explain how regions are connected or isolated from each other.	A. Describe how physical processes shape the environment of a place.	A. Locate the thirteen original colonies and their key cities.
Theme 2	B. Analyze the geography of colonial regions to explain their cultural, social and economic differences.	B. Evaluate the effect of Westward expansion on the production, distribution, and allocation of resources and on the environment.	B. Analyze the cultural characteristics of civilizations to determine how they are similar and different.	B. Compare and contrast regions by examining the cultural characteristics of European, African, and Asian and American societies.	B. Describe a variety of ecosystems, and explain where they may be found.	B. Identify the key regions and resources of the original thirteen colonies.
Key concepts and Understandings						
Theme 2	C. Compare major patterns of population distribution, demographics and migrations in the United States and the impact of those patterns on cultures and community life.		C. Explain how characteristics of civilizations are connected to identities and cultures.		C. Explain how human-environmental interactions shape people and places.	
Key concepts and Understandings						

Key Concepts and Understanding

3. Geographical Study (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 2	D. Analyze the impact of those patterns on cultures and community life c. 15,000 B.C.E to 1763 CE.				D. Explain how the movement of people, goods, and ideas impact world regions.	
Key concepts and Understandings						

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Key Concepts and Understanding

3. Geographical Study						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	Founding	Emerging Globally	Classical Civilizations: Founding of Representative Government	Age of Discovery and Exchange		Structure of Government
Key concepts and Understandings	A. Draw conclusions about regional conflict and cooperation as a consequence of physical geography.	A. Describe how the expansion of transportation and technological developments influenced acquisition of new territories.	A. Explain the significance of physical geography to the development of classical civilizations.	A. Analyze physical geography to explain the availability and movement of resources.		
Theme 3	B. Evaluate the relationships among population, representation, and their effect on power in the new government.		B. Identify the effect of natural forces upon human activities.	B. Describe major changes in patterns of migration and human settlement in Africa, Asia and the Americas resulting from European expansion.		
Key concepts and Understandings						
Theme 3	C. Compare major patterns of population distribution, demographics and migrations in the United States during this era c. 1763-1812.					
Key concepts and Understandings						

Key Concepts and Understanding

3. Geographical Study (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	D. Analyze the impact of those patterns on cultures and community life.					
Key concepts and Understandings						

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Key Concepts and Understanding

3. Geographical Study						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 4	Expansion	Great Depression and World War II	Middle Ages-Regional Interconnectedness and Conflict	Age of Revolution		Government in Action
Key concepts and Understandings	A. Trace the changing boundaries of the United States and describe how it represents the changing relationships with its neighbors and Native Americans.	A. Describe the consequences, both intended and unintended, of environmental decisions.	A. Explain how the spread of cultural patterns and economic decisions shape and are shaped by environments.	A. Explain how and why places changed as a result of revolutions and why people perceived the same place in varied ways.		A. Analyze state and federal electoral results to determine the influence of social, regional and demographic characteristics.
Theme 4	B. Analyze Manifest Destiny in relation to push-pull factors, geographic features, and human environmental interactions to determine their influence on the movement of goods, people and ideas.	B. Analyze the geography of the European and Pacific theaters of WWII to compare war efforts and strategies.	B. Explain how physical geographic characteristics influenced human identities and cultures.	B. Extrapolate the push-pull factors created by revolutions to determine their impacts on population distribution, settlements, and migrations.		
Key concepts and Understandings						
Theme 4	C. Compare major patterns of population distribution, demographics and migrations in the United States and the impact of those patterns on cultures and community life c.1812-1848.	C. Evaluate the political, social, economic, technological and environmental impact of US participation in WWII and America's new role in the post-war world.				
Key concepts and Understandings						

Key Concepts and Understanding

3. Geographical Study						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 5	Conflict and Crisis	The American Stage		The Modern Era		
Key concepts and Understandings	A. Analyze the United States geography of North, South, and West order to explain their cultural, social and economic differences.	A. Evaluate the causes and consequences of demographic shifts and internal migrations.		A. Analyze physical geography to explain the availability and movement of resources.		
Theme 5	B. Evaluate the significance of geography on the conduct of the war and strategy of the North and South.	B. Explain how the physical and human characteristics of places determine their influence on or importance to Cold War events.		B. Explain how technology has reduced barriers and expanded peoples' capacity to make use of, or modify, the physical environment.		
Key concepts and Understandings						
Theme 5	C. Compare major patterns of population distribution, demographics and migrations in the United States and the impact of those patterns on cultures and community life.			C. Evaluate the relationship between technological and scientific advancements and increasing global interaction.		
Key concepts and Understandings						

Key Concepts and Understanding

3. Geographical Study (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 5				D. Analyze major demographic patterns to determine their effect on the human and physical systems.		
Key concepts and Understandings						

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Key Concepts and Understanding

3. Geographical Study						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 6		Contemporary America				
Key concepts and Understandings		A. Analyze physical geography to understand the availability and movement of resources in this era.				
Theme 6		B. Evaluate the relationship between technological and scientific advancements and increasing global interaction in this era.				
Key concepts and Understandings						
Theme 6		C. Locate major cities of Missouri, the United States, and the world; states of the United States and many of the world nations; the world's continents, and oceans; and major topographical features of the United States.				
Key concepts and Understandings						

Key Concepts and Understanding

3. Geographical Study (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 6		D. Explain how physical characteristics and human characteristics that make specific places unique in this era.				
Key concepts and Understandings						
Theme 6		E. Explain how and why different people may perceive the same place in varied ways in this era.				
Key concepts and Understandings						

Key Concepts and Understanding

4. Economic Concepts						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 2	Settlements	Re-emerging America	Early Civilizations: Geography's Impact on History	Accelerated Exchange	World Geography and Cultures	Historical Foundations
Key concepts and Understandings	A. Compare sources of labor, emerging economic production, and availability of land in the New World and their impact on economic development in North and South America.	A. Evaluate how the goals of Reconstruction impacted the economic recovery and growth of regions.	A. Using a world history lens, explain how the concept of economic surplus led to trade and the emergence of specialized labor.	A. Analyze the flow of goods and ideas along ocean and overland trade routes to explain their contributions to economic success or failures of societies in Europe, Africa, Middle East, India, the Americas and China.	A. Analyze resource availability to explain the causes and impacts of conflict or cooperation.	A. Explain how the formation of early America was influenced by the economic theories of the era.
Theme 2	B. Analyze the mercantile system to explain colonial responses to economic control by European nations including England.	B. Explain how the expansion of industrialization, transportation and technological developments influenced different regions and the relationship between those regions.	B. Explain how standardization affects the early stability of a society.		B. Analyze patterns of resource distribution to explain the consequences of personal and public economic decisions.	
Key concepts and Understandings						
Theme 2		C. Apply the concepts of natural resources, capital, labor, investment, profit, and <i>laissez-faire</i> policies to explain the growth of American industry.			C. Use economic concepts such as GDP, scarcity, inflation, to describe and compare places and regions.	
Key concepts and Understandings						

Key Concepts and Understanding

4. Economic Concepts (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 2		D. Analyze the developing interconnectedness among people, big business, labor unions and governments to determine their effect on individuals, society, and public policy.			D. Analyze economic systems to explain their impact on peoples' behavior and choices.	
Key concepts and Understandings						

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Key Concepts and Understanding

4. Economic Concepts						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	Founding	Emerging Globally	Classical Civilizations: Foundations of Representative Government	The Age of Discovery and Exchange		Structure of Government
Key concepts and Understandings	A. Describe the function and purpose of taxes imposed by England following the Seven Years War, evaluating colonial responses to them.	A. Analyze emerging American involvement in world trade to determine its influence on foreign policy and government actions.	A. Describe trade patterns and how they influenced the movement of resources, goods and services.	A. Compare the extent and impacts of African, European, American and Asian trade networks.		A. Compare trade, monetary policy, and taxation under the Articles of Confederation and the Constitution.
Theme 3	B. Compare the emerging economic characteristics of the nation and colonial regions to make predictions about future expansion and conflict.	B. Apply the economic concepts of natural resources, markets, supply and demand, labor, and capital to explain the costs and benefits of imperialism.	B. Explain how standardization impacts the stability of a civilization.	B. Compare the origins, development and effects of coerced labor systems.		
Key concepts and Understandings						
Theme 3	C. Trace the development of the American economic system to explain how taxes, tariffs, and monetary policies were used to establish sustainability and growth.	C. Trace the changing relationship between government and business through economic regulation and deregulation.	C. Explain how political and economic stability affects the well-being of individuals and society.	C. Describe how new sources of wealth resulting from global interaction impacted cultures and civilizations.		
Key concepts and Understandings						

Key Concepts and Understanding

4. Economic Concepts						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 4	Expansion	Great Depression and World War II	Middle Ages-Regional Interconnectedness and Conflict	Age of Revolutions		Government in Action
Key concepts and Understandings	A. Analyze sources of labor, including slavery, and their impact on economic and political expansion.	A. Apply the economic concepts of innovation, supply and demand, barriers to trade, labor, business cycle, credit, and wage gap to explain the causes of the Great Depression.	A. Explain how inter-regional trade intensified the exchange of goods, ideas and people.	A. Analyze the origins and characteristics of laissez faire, market, mixed, and command economic systems to determine their effects on personal, social, and political decisions.		A. Analyze the role that people, businesses, and government play in taxation and spending required to maintain the public good.
Theme 4	B. Explain how the expansion of industrialization, transportation and technological developments influenced different regions and the relationship among those regions.	B. Describe the possible consequences, both intended and unintended, of government policies to improve economic conditions and increase productivity.		B. Examine the connections among natural resources, entrepreneurship, innovation, labor, and capital to determine their effects on an industrial economy in Europe, Africa, Asia and the Americas.		
Key concepts and Understandings						
Theme 4	C. Trace the continued development of the American economic system to explain how taxes, tariffs, and monetary policies were used to establish sustainability and growth.					
Key concepts and Understandings						

Key Concepts and Understanding

4. Economic Concepts						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 5	Crisis and Conflict	The American Stage		The Modern Era		
Key concepts and Understandings	A. Explain how the expansion of industrialization, transportation, and technological developments influenced different regions and the relationship among those regions.	A. Trace the developing complexities of the American economy in the second half of the twentieth century.		A. Analyze economic systems such as market, mixed, and command to determine their impact on economic growth, labor markets, rights of citizens, the environment, and resource allocation in and among regions.		
Theme 5	B. Compare the economic strengths and weaknesses of the North and South before, during and immediately after the Civil War.	B. Compare the role of government in economic systems to explain competing world views.		B. Evaluate the response of individuals, groups, and governments to economic, environmental, health, and medical challenges to understand how systems change and evolve over time.		
Key concepts and Understandings						
Theme 5		C. Describe the consequences, both intended and unintended, of government policies to improve individual and societal conditions.				
Key concepts and Understandings						

Key Concepts and Understanding

4. Economic Concepts						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 6		Contemporary America				
Key concepts and Understandings		A. Apply the economic concepts of innovation, supply and demand, international trade, labor, business cycle, and credit to evaluate global interdependence along with economic and security challenges.				

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Key Concepts and Understanding

5. People, Groups, and Cultures						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 2	Settlements	Re-Emerging America	Early Civilizations: Geography's Impact on History	Accelerated Exchange	World Geography and Cultures.	Historical Foundations
Key concepts and Understandings	A. Analyze the religious, cultural, political and intellectual developments of Russian, Spanish and French regions to explain the development of diverse cultures throughout the Americas.	A. Analyze patterns of immigration to determine their effects on economic, cultural, and political development.	A. Explain the significance of monotheistic and polytheistic religions to the social and political order of early civilizations.	A. Explain how scientific and technological advancements impacted the interconnectedness in and among regions.	A. Compare and contrast the human characteristics within and among regions.	A. Analyze the varying perspectives of individuals and groups regarding the development of the American governmental system to explain emerging divisions and political philosophies.
Theme 2	B. Analyze the religious, cultural, and intellectual developments of the English colonies to explain the development of regionalism and an American identity.	B. Evaluate the short and long-term impact of western expansion on native populations.	B. Describe the origins, structure, and significant beliefs of Judaism, Hinduism, and Buddhism.	B. Analyze the intellectual, architectural, and artistic achievements of the Renaissance resulting from the rebirth of Classical ideas.	B. Explain how groups and institutions of a place develop to meet peoples' needs.	
Key concepts and Understandings						
Theme 2	C. Compare and contrast the interaction of European settlers with Native Americans in both North and South America.	C. Evaluate laws, events, and perspectives to determine the extent to which individuals and groups could participate in, and realize, the promise of American ideals.	C. Describe how the world view of social groups and institutions form culture and define the position of the individual within society.	C. Analyze the rise of Islam as well as the expansion of Christianity, Islam, Hinduism and Buddhism in order to explain their transformations and roles in conflict and cooperation.	C. Analyze the relationship between the physical environment and cultural traditions to determine their impact on individuals, groups, and institutions.	
Key concepts and Understandings						

Key Concepts and Understanding

5. People, Groups, and Cultures (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 2		D. Explain the impact of industrialization on culture, work, education and other social institutions.	D. Analyze scientific, technological, intellectual, and artistic advancements to determine the legacy of the ancient civilizations.		D. Analyze religion and belief systems of a place to determine their impact on people, groups, and cultures.	
Key concepts and Understandings						
Theme 2		E. Trace the changing motivations for, nationalities of, and responses to immigrants to the United States.			E. Describe how a peoples' culture is expressed through their art, architecture and literature.	
Key concepts and Understandings						

Key Concepts and Understanding

5. People, Groups, and Cultures						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	Founding	Emerging Globally	Classical Civilizations: Foundations of Representative Government	The Age of Discovery and Exchange		Structure of Government
Key concepts and Understandings	A. Analyze the perspectives of individuals and groups to explain the extent of their support for the Revolutionary War.	A. Explain the motivation for social and political reforms and their impact on the ability of individuals and groups to realize the promise of American ideals.	A. Explain the significance of mythology, literature and philosophy to the culture and social order of classical civilizations.	A. Analyze the exchange of people, goods and ideas to determine their impact on global interdependence and conflict.		A. Analyze the varying perspectives of individuals and groups regarding the development of the American governmental system to explain emerging divisions and political philosophies throughout the history of the nation.
Theme 3	B. Analyze populations of colonies/states to explain how their cultural, religious, social, and economic characteristics influenced the emergence of regional identity.	B. Analyze the changing relationship between individuals and their place in society including women, minorities, and children.	B. Analyze scientific, technological, intellectual, and artistic advancements to determine the legacy of the classical civilizations.	B. Compare the origins, development and effects of coerced labor systems.		B. Evaluate the intended and unintended impact of government decision-making on individuals, groups, and society.
Key concepts and Understandings						
Theme 3	C. Compare and contrast the perspectives of individuals and groups regarding the development of the American governmental system to explain emerging divisions and political philosophies.	C. Analyze the technological, artistic, intellectual, economic, and cultural changes of the first three decades of the 20 th century to determine their effect on individuals and groups.	C. Analyze the extent and impact of cultural diffusion that results from empire building.	C. Describe how new sources of wealth resulting from global interaction impacted world trade, governments, the arts and people.		
Key concepts and Understandings						

Key Concepts and Understanding

5. People, Groups, and Cultures (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 3	D. Evaluate laws, events, and perspectives to determine the extent to which individuals and groups could participate in, and realize, the promise of American ideals.	D. Assess the impact of WWI related events on the home front including “patriotic” groups, pacifist groups, racial equality and women’s roles.	D. From a historical perspective, explain the origin, structure, spread, and significant beliefs of Christianity.	D. Trace the development and impact of religious reform on exploration and conflicts among groups and nations.		
Key concepts and Understandings						
Theme 3	E. Analyze the artistic, and intellectual achievements of early America to provide evidence of an emerging American identity.			E. Determine the extent and impact of cultural exchange, interaction, and disruption that resulted from the Columbian Exchange and European expansion on the Eastern and Western Hemispheres.		
Key concepts and Understandings						
Theme 3				F. Assess the roles of class, ethnic/racial groups, gender, and age to determine a person’s role in society and social institutions.		
Key concepts and Understandings						

Key Concepts and Understanding

5. People, Groups, and Cultures						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 4	Expansion	The Great Depression and World War II	Middle Ages Regional Interconnectedness and Conflict	Age of Revolutions		Government in Action
Key concepts and Understandings	A. Evaluate the effectiveness of various reform movements, laws, and events to determine their impact on the promise of American ideals.	A. Analyze the artistic and intellectual achievements of the 1930 to understand the human costs of the Great Depression.	A. Analyze scientific, technological, intellectual, and artistic advancements to determine the legacy of European, African and Mesoamerican civilizations.	A. Analyze the intellectual, artistic, and literary achievements of the Enlightenment and revolutions in order to determine how they challenged the status quo.		A. Explain how political parties and interest groups reflect diverse perspectives and are influenced by individuals.
Theme 4	B. Analyze the slave experience in North and South America to determine its impact on African-American cultures.	B. Assess the impact of war-related events on women's roles, family structures, religious identity, education, commerce, entertainment, agriculture and other elements of the home front.	B. From a historical perspective, explain the origin, structure, spread, and significant beliefs of Islam.	B. Analyze new technologies and forms of energy to determine their effects on the lives of individuals, groups, and societal organization.		B. Evaluate factors that shape public opinion on elections and policy issues.
Key concepts and Understandings						
Theme 4	C. Analyze artistic, intellectual, and religious movements to show how they reflect the aspirations and beliefs of the developing nation.	C. Evaluate the effect of the Great Depression and WWII on women, families, and minorities.	C. Describe how the world view of individuals, social groups, and institutions changed as a result of connections among regions.	C. Analyze social and educational reform movements to determine their impact on the challenges brought about by revolutions.		C. Predict the consequences that occur when institutions fail to meet the needs of individuals and groups, and when individuals fail to carry out their personal responsibilities.
Key concepts and Understandings						

Key Concepts and Understanding

5. People, Groups, and Cultures (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 4	D. Describe the culture and accomplishments of native American cultures to compare the various ways they responded to American expansion.	D. Analyze the impact of the Great Depression and World War II on the arts.		D. Analyze political, social, cultural, artistic and economic revolutions to determine how they impacted the concepts of class, race, tribe, slavery, and caste affiliation.		
Key concepts and Understandings						
Theme 4	E. Analyze patterns of immigration to determine their impacts on the cultural, social, political and economic development.					
Key concepts and Understandings						

Key Concepts and Understanding

5. People, Groups, and Cultures						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 5	Conflict and Crisis	The American Stage		The Modern Era		
Key concepts and Understandings	A. Determine the significance of the ideas contained in major speeches, literature, music, and writings from diverse individuals on the perspectives of people, groups and movements.	A. Evaluate the effect of the internal tensions caused by the Cold War on societal groups, organizations, and government.		A. Analyze causes and patterns of human rights violations and genocide and suggest resolutions for current and future conflicts.		
Theme 5	B. Describe the impact of scientific and technological advances on the outcome of the war and its effect on people and diverse groups.	B. Analyze the scientific, technological, artistic, intellectual, economic, political, and cultural changes of the post-war period to determine their effect on individuals and groups.		B. Analyze the process of globalization to determine its effect on global conflict and cooperation.		
Key concepts and Understandings						

Key Concepts and Understanding

5. People, Groups, and Cultures (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 5	C. Analyze the evolution of the women's movement to trace its continued development and evaluate its impact.	C. Evaluate social reforms to determine their impact on the ability of individuals and groups to realize the promise of American ideals.		C. Analyze the technological, intellectual, artistic, and literary achievements of the modern era to determine how society reflects and challenges the status quo.		
Key concepts and Understandings						
Theme 5	D. Analyze the evolution of the Abolitionist Movement to trace its continued development and evaluate its impact.	D. Analyze push-pull factors to explain changing immigration patterns and their continuing effects on the United States.		D. Analyze how the roles of class, ethnic, racial, gender and age groups have changed in society, including causes and effects.		
Key concepts and Understandings						
Theme 5	E. Trace the development of African American culture in non-slave states and in the context of slavery.					
Key concepts and Understandings						

Key Concepts and Understanding

5. People, Groups, and Cultures						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 6		Contemporary America				
Key concepts and Understandings		A. Analyze scientific, technological, artistic, intellectual, economic, political, and cultural changes to determine their effect on individuals, groups and society.				
Theme 6		B. Analyze push-pull factors to explain changing immigration patterns and their continuing effects on the United States.				
Key concepts and Understandings						
Theme 6		C. Assess the response of individuals, groups, and the government to societal challenges to understand how systems change and evolve over time.				
Key concepts and Understandings						

Key Concepts and Understanding

5. People, Groups, and Cultures (cont'd)						
	6-8 American History	9-12 American History	6-8 World History	9-12 World History	6-8 Geography	9-12 Government
Theme 6			D. Analyze how the roles of class, ethnic, racial, gender and age groups have changed society, including causes and effects.			
Key concepts and Understandings						

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